

SOUTH CENTRAL KANSAS REGIONAL TRAUMA SYSTEM PLAN



South Central Kansas Trauma Region

**Prepared by SCK Trauma Region Executive Committee
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SOUTH CENTRAL KANSAS REGIONAL TRAUMA SYSTEM PLAN
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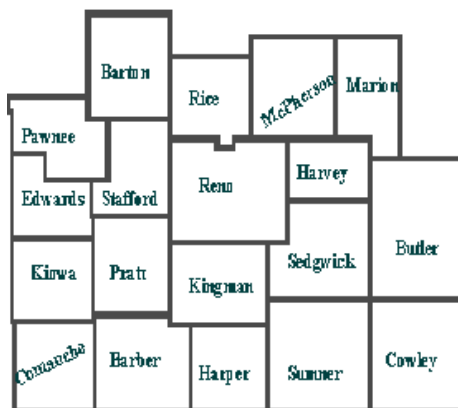
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South Central Kansas Regional Trauma System Plan

Introduction

South Central Kansas Trauma Region



The 19 counties of the South Central Kansas Trauma Region cover 17,222 square miles with an approximate total population of 800,507. Thirty hospitals offer emergency care in the region. There are 3,042-staffed beds including specialty hospitals in the region.

For a complete listing of counties in the South Central Kansas Trauma Region, see Appendix A.

Population/Sq Miles – U.S. Census Bureau-2000 Census

Hospitals – Kansas Hospital Association, 2004 Annual Stat Report

In Kansas, 75 percent of the population resides in 10 of 105 counties leaving most counties designated as rural or frontier. Thirty percent of the Kansas population resides in the 19 counties of the South Central (SC) region. One county is classified as urban, three are classified as semi-urban, four are classified as densely settled rural, seven are classified as rural and four are considered frontier counties (Kansas Department of Health and Environment population density groupings based on the 2000 Census). One of the 19 counties has a population over 100,000, three have populations of 50,000 to 100,000, four counties have 20,000-50,000, seven have 5,000-20,000, and four have populations less than 5000. There is one metro area located in the region, Wichita Metro, encompassing Sedgwick, Butler, and Harvey Counties. (Kansas Department of Health and Environment: Office of Local and Rural Health: *Primary Care health Professional Underserved Areas Report, Kansas 2004*).

South Central Region by Population Density

Thirty percent of the Kansas population resides in the SC region, one county is classified as urban, three are classified as semi-urban, four are classified as densely settled rural, seven are classified as rural and four are considered frontier.

Source: Kansas Department of Health and Environment: Office of Local and Rural Health: *Primary Care health Professional Underserved Areas Report, Kansas 2004*



Population Density	Rural / Urban Peer Group
Fewer than 6.0 persons per square mile	Frontier
6.0 - 19.9 persons per square mile	Rural
20.0 - 49.9 persons per square mile	Densely-Settled Rural
50.0 - 149.9 persons per square mile	Semi-Urban
150.0 persons or greater per square mile	Urban

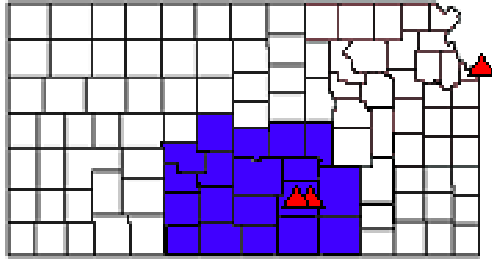
Background

The South Central Kansas Trauma Region (SCKTR) is composed of over 165 individuals representing 99 organizations. A list of member organizations is located in Appendix B. The general membership meets on an annual basis. The Executive Committee meets at least quarterly. Three subcommittees: pre-hospital/communications (including Emergency Medical Dispatch [EMD] and EMD Continuous Quality Indicators [CQI]), acute care/rehabilitation, and prevention/education meet on an ongoing basis.

SCKTR started work on the regional trauma plan in 2004. SCKTR subcommittees are primarily responsible for developing and monitoring the regional trauma plan. The executive committee provides plan oversight.

South Central Kansas Regional Trauma System Plan

Kansas has three voluntary American College of Surgeons (ACS) verified Level I Trauma Centers including the University of Kansas Hospital, (Kansas City, Wyandotte County), Via Christi at St. Francis (Wichita, Sedgwick County) and Wesley Medical Center (Wichita, Sedgwick County). Via Christi and Wesley Medical Center are located in SCKTR. The SC region borders north Oklahoma. Although regional data is needed to determine trauma patient destination, many critically ill trauma patients are transported to the Wichita area while outlying areas might transfer to trauma centers in northeast Kansas and Oklahoma. In addition, many critically ill patients are transferred into the SC region from other Kansas regions to take advantage of high-level trauma patient care resources.



ACS Verified Level I Trauma Centers

There are three voluntary ACS verified Level I Trauma Centers in Kansas. Two are located in the SC region, Wesley Medical Center and Via Christi St Francis, both in Wichita, Kansas.

Source: American College of Surgeons Trauma Programs: Verified Trauma Centers.
<http://www.facs.org/trauma/verified.html> Kansas Department of Health and Environment.

Resources

Although densely populated in some areas, the 19 county region has an expansive rural population to consider in terms of resource utilization. In addition to population diversity, the SC region is unique in diversity of facilities and resources. There are 1,523 Medical Doctors (MD) and 145 Doctors of Osteopathy (DO) in the SC region. While the SC region boasts a large number of physicians, over 81% are located in Sedgwick County. Seven counties have less than five MDs and of those, four counties have just one MD each. In the four counties with one MD, Comanche has one PA and one Advanced Registered Nurse Practitioner (ARNP); Edwards has one DO, one PA, and one ARNP; Kiowa has one ARNP; and Stafford has one DO, one PA, and three ARNPs. (Healthcare Data Governing Board, *Healthcare Professional Inventory, Kansas. November 2003*)

ACS Verified Trauma Centers: The region has two ACS verified Level I Trauma Centers, Via Christi at St Francis and Wesley Medical Center both in Wichita (Sedgwick County). The SC region does not have verified Level II, III, or IV Trauma Centers. Data is not currently available as to the intent of any ACS verification and/or state designation in the SC region.

South Central Kansas Regional Trauma System Plan

Part A – System Access

Emergency dispatchers are usually the beginning of emergency medical response and trauma system activation. Emergency dispatchers provide First Responders and EMS with essential information regarding location and nature of emergency calls. Effective communication among emergency responders is vital to patient care.

A(a) 9-1-1 or single access telephone number availability

In the SC region, telephone and 9-1-1 are the most frequent methods used by the public to access the emergency medical system and report emergency situations. All counties in the SC region have access to 9-1-1.

Enhanced 9-1-1

Enhanced 9-1-1 provides the ability for emergency dispatch centers to identify the caller's phone number and location. Currently the service is available for landline calls only, and provides address and phone numbers.

In 1996, the Federal Communications Commission (FCC) issued a Report and Order requiring all wireless carriers and cell phone manufacturers to provide the capability for automatically identifying to emergency dispatchers the location from which a wireless call is being made. This requirement was to be operational by October 1, 2000, with extensions made for individual states and carriers. (ftp.fcc.gov/Bureaus/Wireless/Orders/2000/da002336.html)

Standard 9-1-1 service usually reaches local or county agencies, but the Kansas Highway Patrol (KHP) advertises three numbers: 9-1-1, *HP (to reach the KHP directly) and *KTA (to reach the Highway Patrol for turnpike-related matters). Although 9-1-1 has been designated as the "official" number for reporting emergencies, it is by no means universal, either for wired or wireless phones. There are also presumably many locations where 9-1-1 does not work for a wireless phone user because the wireless carrier hasn't enabled 9-1-1 in its routing equipment.

When dialing 9-1-1 from a wireless phone, the call might be routed to a local law enforcement agency, a county sheriff or to the state-level law enforcement agency. The call may also be routed to a communications center outside the immediate location.

In the SC region, 17(81%) of 21 dispatch agencies completed the 2003 Kansas Public Safety Communications Survey. The survey was sent to 21 agencies in the SC region that dispatched emergency services in 2003. This included state, municipal and county law enforcement, and fire departments, although not all agencies dispatch EMS. Annually, the SC region receives over 430,000 emergency calls. With the increased use of cellular telephones, dispatch agencies are receiving heavier call volumes from these users. Because Enhanced 9-1-1 (E 9-1-1) is not a standard in Kansas, the dispatch agencies do not automatically receive the same level of information and dispatchers may not be able to collect information that would normally be visible through 9-1-1 service. This can dramatically increase response time and may negatively impact patient outcomes. Evidence suggests improved public access to 9-1-1 systems can improve outcomes for trauma patients. The Kansas Public Safety Communications Committee has been established and addresses related issues.

South Central Kansas Regional Trauma System Plan

2003 Kansas Public Safety Communications Survey Dispatch, 9-1-1, E9-1-1, Wireless and GPS

	Numerator	Denominator	%
Total # Agencies		21	
Surveys Returned	17	21	81
Dispatch Service Provided	16	16	100
E9-1-1 Dispatch Capabilities – Yes	11	16	69
Receive Wireless Emergency Calls - Yes	16	16	100
GPS Capability - Yes	1	16	6.3

Needs Analysis

SCKTR identified the need for dispatch agencies to expand systems to accept E 9-1-1 calls from phone companies and ensure phone companies deliver the calls once dispatch agencies are able to receive calls. There is a need for regional Global Positioning System (GPS) capability.

Objectives

- Monitor E 9-1-1 use and implementation in the region.
- Support statewide efforts in the development and implementation of E 9-1-1 access.
- Support local efforts in the development and implementation of E 9-1-1 access.
- Support GPS increased capabilities including cellular, Voice over Internet Protocol (Voice over IP-a method for taking analog audio signals, turning them into digital data that can be transmitted over the internet) and Private Branch Exchange (PBX-a private telephone network used within businesses to reduce the need for connecting an external line to every telephone in a business).

Activities In Progress

- Other than state and federal ongoing requirements, no regional activities are in progress.

Planned Activities

- The statewide plan for E 9-1-1 will be supported.
- E 9-1-1 implementation will be monitored in the region related to trauma care issues and support will be provided to local organizations.
- SCKTR will support increased capabilities including cellular, Voice over IP, and PBX.

A(b) Backup or emergency systems

In 2003, the region had 21 dispatch/communications agencies. The majority are operated by law enforcement agencies, and are required to have backup or emergency systems. Weapons of Mass Destruction and emergency preparedness planning committees address issues regarding communications centers' backup and emergency systems.

All counties are mandated by the Kansas Department of Emergency Management (KDEM) to have mass casualty disaster plans developed by their County Emergency Management Departments. These disaster plans address such topics as EMS response, hospital response and emergency communications resources. SCKTR will encourage Region III EMS to review their county's disaster plans to assure that the EMS portions of the plans are current and reflect EMS and trauma system operations in their county. County disaster plans are tested annually. Hospitals also are required to have two disaster drills per year. These drills include EMS agencies and communications centers.

Needs Analysis

SCKTR does not currently have regional information regarding communications center backup and emergency systems.

South Central Kansas Regional Trauma System Plan

Objectives

- Monitor and support development and use of backup plans.
- Collect data on backup system procedures for SC region dispatch agencies and encourage backup system development programs.
- Develop a map or grid of system backups.

Activities in Progress

- Local emergency management personnel are developing community evacuation plans.

Planned Activities

- The EMD subcommittee will obtain backup plans for communications/dispatch agencies.
- A map will be developed to document backup plans in use.
- Development and implementation of backup plans will be encouraged.

Long-Term Goals

- All communications/dispatch agencies will have backup plans in place.

A(c) First responder availability

The Kansas Board of Emergency Medical Services (KBEMS) certifies First Responders after completion of an approved First Responder training program. Agencies in Kansas, including law enforcement and fire agencies may utilize non-certified first responder and certified non-affiliated responder personnel who may provide care without medical protocols and/or medical direction. Data is not available regarding certified first responders and non-certified first responders employed by agencies outside of EMS who do not receive oversight from KBEMS. However, SCKTR recognizes the vital role of first responders. First responders are often first to arrive on scene, view the patient, and perform an initial patient assessment. They further impact the system with respect to triage and trauma alert because they have the ability to influence mode of transportation decisions. Of concern to SCKTR is whether the information obtained by personnel/first responders is transferred to EMS and then to the hospital.

Needs Analysis

Comprehensive data is not available regarding the work settings, requirements, roles and responsibilities of non-certified first responders. SCKTR has identified issues regarding on scene communication about patient care between first responders and EMS.

Objectives

- Determine the number of fire departments and law enforcement agencies that require medical training.
- Obtain data on non-certified first responder training, location and responsibilities.
- Support efforts to identify needs regarding on scene communication.
- Any person with the responsibility to respond and interface with the emergency medical system must do so with medical oversight.

Activities in Progress

- KBEMS monitors the activities of certified EMS personnel, but not the activities of non-certified first responders.

Planned Activities

- Develop a list of agencies with non-certified first responders including the number of first responders within agencies.
- Develop a list of agencies requiring medical training and level of medical training for first responders, to include quality outcomes.

South Central Kansas Regional Trauma System Plan

Long-Term Goals

- First responders will have basic emergency medical training.
- Any person with the responsibility to respond and interface with the emergency medical system must do so with medical oversight.

Evaluation Plans and Results for Activities

- A list of agencies with first responders and medical training levels will be developed.

A(d) Public education regarding resources and accessing help

The public most commonly accesses the system through telephone and 9-1-1. In the SC region, public education regarding emergency system access is determined by individual agencies and organizations. With increased use of cellular technology accessing the emergency medical system through cellular technology has increased. Refer to Section A(a) Enhanced 9-1-1, p. 3 for additional information.

Needs Analysis

There is a need to educate the public regarding the proper use and advantages of E 9-1-1.

Activities in Progress

- Local organizations implement public education at their discretion.

Planned Activities

- Support the community-based approach to public education.
- Support and encourage public education regarding the advantages of E 9-1-1.

South Central Kansas Regional Trauma System Plan

Part B – Communications

Pre-hospital care in the SC Kansas Regional Trauma System Plan includes prevention, EMS, first responders, dispatch and communications centers. Pre-hospital care is a vital component of trauma systems. What happens in this setting often directly impacts both initial treatment and eventual outcome. The pre-hospital components of a trauma care system should provide easy access and prompt response by a qualified professional responsible for assessment, stabilization, triage and transport to the most appropriate hospital.

B(a) Communications/dispatch centers and level of resources

Data from the 2003 Kansas Public Safety Communications Survey and the 2004 SCKTR EMD Training Survey were used in the following section of Part B(b) – Communications constraints.

B(b) Communications constraints

Equipment

Radio is the primary method of communication for pre-hospital care providers in the SC region. The brand and age of radio equipment used in the region varies, which affects technology upgrades and interoperability. Based on the 17 agencies reporting the age of their communications systems in the 2003 Kansas Public Safety Communications Survey, approximately 9.5% of communications systems are 11 years or older. For many emergency services agencies in the region, technology upgrade costs to use an 800 MHz tower would be prohibitive.

Cellular telephones are a popular tool for EMS to hospital communication. However, they are not always reliable due to remote locations, terrain and service coverage.

<u>Manufacturer</u>	<u>System Age (in years)</u>					Dispatch Systems Type & Age
	<u>0 - 5</u>	<u>6 - 10</u>	<u>11 - 15</u>	<u>16 - 20</u>	<u>More than 20</u>	
Motorola	5	4	1	0	0	42.8% of dispatch systems used in the SC region are 6 years or older with two agencies reporting equipment age as 11 years or older. <i>Source: 2003 Kansas Public Safety Communications Survey, Kansas Foundation for Medical Care (KFMC)</i>
EF Johnson	0	0	0	0	0	
M/A - COM	0	0	0	0	0	
Ericsson	2	0	1	0	0	
Other	5	3	0	0	0	

Distance

The 2003 Kansas Public Safety Communications Survey revealed a majority of the responding agencies, 75% responds to calls covering 1,000 square miles or less. Over 90% of agencies (16/17 responding to the question) reported providing 24-hour dispatch services.

<u>Square Miles Covered</u>	<u># Agencies</u>	<u>% Agencies</u>	Dispatch Agencies and Square Miles Covered
Less than 500	2	12.5%	
501-1,000	10	62.5%	Over 75% of the SC region's dispatch and communications, centers respond to calls covering 1,000 square miles or less. <i>Source: 2003 Kansas Public Safety Communications Survey</i> <i>Sixteen of 17 responded to this question.</i>
1,001-5,000	3	18.8%	
5,001-10,000	0	0.0%	
10,001 or more	1	6.3%	

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Population

Of the 19 counties within the SC region, one has a population of 100,000 or more. The remainder of the region is rural including four counties with a population of less than 2,500. According to Kansas Department of Health and Environment (KDHE), Comanche, Kiowa, Edwards and Barber Counties have less than six persons per square mile making them "frontier" under the HRSA classification system.

<u>Population Served</u>	<u># Agencies</u>	<u>% Agencies</u>
Less than 2, 500	1	6.3%
2,500-5,000	2	12.5%
5,001-10,000	4	25.0%
10,001-100,000	8	50.0%
100,001 or more	1	6.3%

Dispatch Agencies and Population Served

Fifty percent of the SC region's dispatch and communications centers serve populations of 10,000 or more.

Source: 2003 Kansas Public Safety Communications Survey, KFMC

Sixteen of 16 responded to this question.

Terrain

Due to the rural nature of the state, cellular telephone coverage is not 100% statewide. Not only do large gaps of cellular service exist in geographically isolated areas, gaps exist along the heavily populated Interstate transportation system.

Cellular telephones

Cellular telephones present another method for accessing the emergency medical system. The Wireless Enhanced 9-1-1 Act was passed during the 2003 Kansas legislative session. The legislation is designed to allow 9-1-1 agencies to track where a citizen is calling from on their wireless telephone and created a funding mechanism to expand wireless 9-1-1 services throughout the state.

Inter-Agency Communication

According to the 2003 Kansas Public Safety Communications Survey, 18.8% of the agencies reported law enforcement, EMS, and fire departments were unable to communicate on one radio channel or talk group. Five agencies reported an operational concern with radio communications between agencies in the region, as well as those bordering Oklahoma.

Needs Analysis

SCKTR identified equipment interoperability and communications between providers as a major issue effecting trauma patient care. The inability to communicate effects the amount of time required to respond to the scene increasing the amount of time between the initial call from dispatch to initial patient assessment, triage, stabilization and transport to the most appropriate hospital.

Response times vary greatly between agencies in the SC region due to enormous disparity in populations, areas of coverage and full-time vs. part time or volunteer staffing. Methods to monitor and improve response times are being addressed with developing plans to use Kansas Trauma Registry data.

Calls from cellular phones do not provide the same level of information as calls from wired phones provide. The cellular caller's phone number and location are not available to the call receiver. If the caller is not familiar with the area they are calling from, they cannot provide an accurate address. As a result, response times to cellular callers can be longer than from wired phones. The FCC has directed cellular providers to develop GPS technology that will provide cellular callers with the same level of E 9-1-1 services as wired callers.

South Central Kansas Regional Trauma System Plan

Objectives

- Support the development, implementation, and funding of a statewide communications system.
- Support and monitor the state interoperability plan as it relates to trauma care.
- Coordinate with South Central Kansas Hospital Preparedness Region.

Activities in Progress

- No activities at this time.

Planned Activities

- Support implementation of a statewide communications system as it relates to trauma care.
- The South Central Kansas Hospital Preparedness representative will be invited to attend executive committee and other SCKTR meetings.
- Support the development of data communications systems, i.e. EMSsystem® and Web EOC®.

B(c) Contact information for each center including radio frequencies

See Appendix C.

B(d) Training for area communication personnel

In June 2004, SCKTR conducted a survey of 19 dispatch agencies in the region to determine training needs, 15 dispatch agencies responded. Overall, the survey revealed several different EMD training programs are in use and some agencies do not use an EMD training program at all.

- Fifteen agencies dispatch EMS,
- Thirteen agencies use an EMD training program to train dispatchers,
- Two agencies do not use an EMD training program and
- Twelve agencies employed Medical Priorities Dispatch of the National Academies of Emergency Dispatch (NAED).

Both the 2003 Kansas Public Safety Communications Survey and the 2004 SCKTR EMD Training Survey identified many agencies cite liability concerns as a primary reason they do not pursue EMD training. In addition, overall costs of training, including staff time out of office and travel, prohibitive course expenses and high volumes of dispatcher attrition, were reasons EMD training was not pursued. Most dispatch services are provided by law enforcement, where higher volumes of law enforcement related calls as compared to EMS related calls make EMD training a low priority.

Needs Analysis

Dispatch agencies have difficulty hiring and retaining employees. Low pay, long hours, weekends, night shifts, and mandatory overtime are responsible for employee burnout and large turnover within dispatch agencies. Part-time shifts, shift trading, higher pay, and better benefits could attract more trainees and help keep experienced call takers and dispatchers from resigning. APCO (Association of Public-Safety Communications Officials) is working on providing a staffing standard for communications centers. The project is named RETAINS (Responsive Efforts to Assure Integral Needs in Staffing).

Objectives

- Partner with the Southeast Kansas Trauma Region (SE) and the Southwest Kansas Trauma Region (SW) to address EMD issues.
- Train one additional Medical Priorities instructor for the southern regions (SW, SC, and SE), for trauma.
- Maintain a minimum of two Medical Priorities instructors for the southern regions for trauma.
- Provide one Medical Priorities/EMD training course per each southern trauma region.
- Provide ongoing re-certification training as needed.

South Central Kansas Regional Trauma System Plan

- Purchase Medical Priorities Card Sets for participating agencies.
- Implement and follow the Medical Priorities Dispatch of the National Academies of Emergency Dispatch (NAED) Continuous Quality Improvement model.

Activities in Progress

- The pre-hospital/communications subcommittee and EMD subcommittee have developed and are in the process of implementing a plan for EMD education in the region in conjunction with the SE and SC regions.
- Several dispatch centers in the southern regions indicated they were interested in receiving EMD training for their staff; training for departments is under evaluation.
- Selection for the Medical Priorities instructor has been completed and training is in progress.
- The EMD subcommittee meets on a regular basis.

Long-Term Goals

- Regional standardization of the medical dispatch system.
- Educate the communications agencies as to the importance of EMD.
- Regional EMD training will be provided to interested agencies.
- Secure funding sources to maintain trained EMD instructors.

Evaluation Plans and Results for Activities

- The EMD goals will be completed by December 2007.

B(e) Response & Scene Times

Currently the number of agencies with set standards for response and scene times is not known. Protocols are the responsibility of each service or organization in the SC region. The Medical Priorities CQI guidelines recommend call information from communications and dispatch agencies is conveyed to units within two minutes of call receipt.

Needs Analysis

Regional response and scene times need to be determined, collected and evaluated. A standardized mechanism for collecting regional data on response and scene times has not been developed or implemented. A regional standard has not been established for response and scene times. Collected data needs to be reported to a central collection point to be determined.

Objectives

- Encourage the Kansas Trauma Registry Subcommittee to include response and scene times as a required data element for future monitoring and measurement activities.
- Dispatch agencies will convey trauma patient information to units within 2 minutes of call receipt.
- Trauma system patients will receive pre-hospital emergency care within the following defined parameters 75% of the time (unless there are extenuating circumstances).
 - Response Times
 - Urban – 10 minutes or less
 - Suburban – 12 minutes or less
 - Rural – 30 minutes or less
 - Inter-hospital transfer of patients is completed in a timely fashion - 6 hours
 - Time to definitive care from first hospital – 6 hours

(Committee on Trauma (1993) *Resources for Optimal Care of the Injured Patient: 1993*. American College of Surgeons, Chicago).
- SCKTR EMD subcommittee will develop a reporting structure from the communications center to SCKTR regarding time between call receipt and actual unit dispatch time.

Activities in Progress

- SCKTR EMD (Medical Priorities) project.

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Planned Activities

- The executive committee will approach the Kansas Trauma Registry Subcommittee about collecting data to determine response and scene times. If approved, monitor and evaluate and scene time data.
- Medical Priorities response time goals will be communicated to dispatch agencies.

Long-Term Goals

- The Kansas Trauma Registry will collect response and scene times.
- Kansas Trauma Registry data will be provided for analysis and trending.
- Implementation of performance improvement (PI) review.

Evaluation Plans and Results for Activities

- SCKTR will have the ability to monitor and evaluate response and scene times on a regional scale.
- Benchmarks for response and scene times will be established.
- After development, the region will follow standards for response and scene times.

B(f) Communications for multi-agency scenes

With exception to air transport providers there are no standardized systems that allows for communications at multi-agency scenes.

The Major Emergency Response Group (MERGe) is a system of preparation, response, and recovery for major emergency medical events effecting licensed ambulance services for disaster management within Kansas. The group is comprised of EMS leaders who know the importance of an organized response system and provide experience, leadership and expertise. MERGe provides incident command staffing, which includes planning, operations, finance, logistics and resource coordination. MERGe is activated for disasters, mass casualty incidents, overwhelmed EMS systems, and other major events. Currently, funding has been provided to form and support regional medical response teams. For additional background information, refer to B(b) Communications Constraints, pp. 7-9.

Needs Analysis

For needs analysis, refer to B(b) Communications Constraints, pp. 7-9.

Objectives

- Support and monitor the state interoperability plan for issues effecting trauma patient care.
- Support MERGe in the region.

Activities in Progress

- Support implementation of a statewide communications system.

Planned Activities

- Support MERGe activities.

South Central Kansas Regional Trauma System Plan

Part C - Field Triage Guidelines

Trauma triage protocols are the responsibility of each organization in the region and are developed in conjunction with the local medical adviser in each county. The regional trauma council has access to few local protocols despite efforts to obtain those currently used in the region. EMSsystem® was implemented in the SC region in 2004. EMSsystem® is a web-based system that provides current information regarding hospital diversion and resource status.

Regional data from the Kansas Trauma Registry will be used when available to determine current patient flow patterns.

SCKTR developed triage guidelines based on the ACS Committee on Trauma criteria. (See Appendix D)

C(a) Triage Guidelines

(a)1 Classification of patients by severity (physiological, anatomical, mechanism, co-morbid factors etc.

See SCKTR Triage Protocol in Appendix D.

(a)2 Acknowledgment of level of pre-hospital care provider available (including air medical transport).

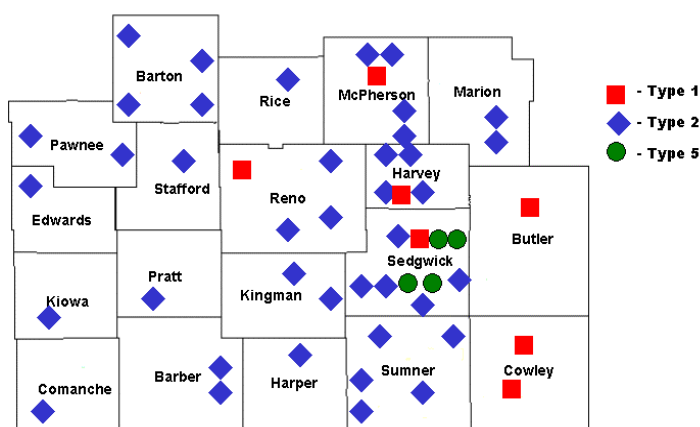
(a)3 Trauma team notification/activation

See SCKTR Field Triage Protocol in Appendix D.

KBEMS certifies ambulance services in Kansas and provides licensing for three types of services: Kansas Statute KAR 109-1-1.

- Type I - provides Advanced Life Support (ALS),
- Type II - provide Basic Life Support (BLS), or BLS with ALS services based on availability and
- Type V - provide critical care transport.

In the SC region, there are 51 EMS services, Type I has seven certified, Type II has 40 certified and out of the type II many provide ALS services based on availability. Type V has four certified services.



EMS Service Location & Type

There are 51 EMS services in the SC region. This map shows the Licensure Type by county (identifiers do not indicate exact location of the service within the county).

Source: Kansas Board of Emergency Medical Services, March 2005.

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Six levels of certification are available for pre-hospital personnel in Kansas, including:

- First Responder (FR),
- Emergency Medical Technician (EMT),
- Emergency Medical Technician-Intermediate (EMT-I),
- Emergency Medical Technician-Defibrillator (EMT-D),
- Emergency Medical Technician I-D (EMT I-D – holds both the Intermediate and Defibrillator levels) and
- Mobile Intensive Care Technician (MICT-Paramedic).

EMS Personnel by Certification Type

	<u>FR</u>	<u>EMT</u>	<u>EMT-I</u>	<u>EMT-D</u>	<u>EMT I-D</u>	<u>MICT</u>	<u>Total</u>
Total	202	2074	216	25	84	501	3102

Source: Kansas Board of Emergency Medical Services, November 2004

Two air ambulance companies provide services for the SC region. The services are licensed and regulated by KBEMS. Trauma protocols are the responsibility of each air ambulance service

Needs Analysis

SCKTR has limited information regarding the current trauma triage protocols in use in the region. Standardized triage and trauma alert guidelines have not been implemented in the region and the need exists for all providers of trauma care to communicate the same language regarding trauma patients. Regional data from the Kansas Trauma Registry is needed to determine current patient flow patterns.

Objectives

- Encourage all pre-hospital agencies and hospitals to use SCKTR field triage guidelines which are based on the “Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago”.
- Monitor implementation of the SCKTR field triage guidelines.
- Continuously evaluate and improve the SCKTR field triage guidelines based on feedback from pre-hospital agencies and hospitals.
- SCKTR will request valid and accurate Kansas Trauma Registry data to establish a regional baseline pattern.

Activities in Progress

- SCKTR has developed a model field triage protocol for recommendation to pre-hospital care agencies and hospitals in the region. The June 2005 general members approved the SCKTR field triage protocol.

Planned Activities

- Education regarding use of the SCKTR field triage guidelines will be provided to pre-hospital agencies and hospitals.
- SCKTR will support and encourage ACS verification and/or state designation of all hospitals throughout the region according to state guidelines.

Short-Term Goals

- All pre-hospital agencies and hospitals will implement the SCKTR field triage guidelines for trauma patients.

Long-Term Goals

- Include all hospitals in the state designation system.

Evaluation Plans and Results for Activities

- Kansas Trauma Registry data will be used to determine current patient flow in the region.

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- Data from the Kansas Trauma Registry should show increased use of the SCKTR field triage guidelines.
- Promote the use of an identification number with the trauma registry to establish patient flow patterns.

C(b) Diversion Policies

Diversion policies are the responsibility of local organizations. Currently, SCKTR does not have sufficient regional data to evaluate, make statements about, or provide plans and recommendations on diversion policy issues.

Needs Analysis

Regional data on diversion is not available to evaluate the current system.

Objectives

- All hospitals in the SC region will participate in EMSsystem®.
- EMSsystem® will be used to establish a regional baseline to evaluate diversion.
- SCKTR will support the Kansas Trauma Program hospital designation system.

Activities in Progress

- To be determined when data becomes available.

Planned Activities

- SCKTR will request EMSsystem® reports from the Kansas Hospital Association (KHA) to determine diversion episodes.
- SCKTR will work with hospitals to review Advisory Committee on Trauma (ACT) proposed hospital designation criteria and obtain regional feedback about the hospital designation process.

Long-Term Goals

- The region will develop and implement a coordinated approach for diversion.
- The region will determine hospital trauma care resources.

C(c) Resource Utilization Protocols

Resource utilization protocols have not been addressed by the SCKTR. The Kansas Trauma Program does not have a plan implemented for designation of trauma centers. The ACS Committee on Trauma currently verifies trauma centers based on the depth of resources available for care of the critically injured patient.

In the SC region, patients are transported and transferred to hospitals according to local protocol. Written transfer agreements occur at the discretion of individual facilities and the SC region does not have copies of transfer agreements. Bypass of local facilities has not been addressed by the SCKTR; however, the SCKTR field triage guidelines provide an initial foundation. The lack of accurate and timely regional data affects the ability to address bypass issues. Kansas Trauma Registry data will be necessary to establish regional baseline information regarding bypass issues allowing SCKTR to base system improvements on accurate data. Also affecting the ability to address bypass issues is the lack of policy for hospital designation. The Kansas Trauma Program does not have a process in place to designate trauma facilities in order to determine patient destination. SCKTR distributed "Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago" to general members to build awareness of trauma center criteria.

An additional tool used to effectively communicate capacity and availability of resources for emergency departments and transport services is EMSsystem®. EMSsystem® was implemented in Kansas in November 2004 and is a web-based program providing real-time information regarding hospital and transport services resources and capabilities. It is operated on a computer

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located in the hub of operations, i.e., in the hospital emergency department or other location staffed 24-hours a day and in the dispatch centers of transporting EMS agencies.

(c)1 Acknowledgement of regional resources (EMS and hospital) and geographic make-up and why bypass of local facilities may be appropriate.

SCKTR acknowledges that bypass protocols may be appropriate.

(c)2 Instances when nearest facility should not be bypassed

SCKTR recommends facilities not be bypassed when the following complications exist:

- Patient(s) with Airway Compromise,
- Patient(s) in Cardiac Arrest or Impending Arrest,
- Severe Weather Conditions and
- Consider pediatric patients with suspected severe hemorrhage and no IV line established.

Needs Analysis

Regional data is needed to establish a baseline for hospital bypass.

Objectives

- SCKTR will support the Kansas Trauma Registry in providing accurate and timely data.
- SCKTR will support the efforts of the Kansas Trauma Program in establishing clear guidelines for designation of trauma centers.
- Analyze the SCKTR Trauma Capabilities Assessment data.
- Obtain data from EMSys[®] on diversion episodes.

Activities in Progress

- SCKTR volunteers support to the Kansas Trauma Registry. KDHE will continue to provide technical support to hospitals to aid with Kansas Trauma Registry data quality and completeness.

Planned Activities

- Continue to support the Kansas Trauma Registry and hospital designation.
- Determine needs and develop goals based on the SCKTR Trauma Capabilities Assessment data.

Long-Term Goals

- As more accurate and timely Kansas Trauma Registry data is provided, more aggressive and specific plans will be developed.
- The region will determine hospital trauma care resources.

C(d) Facility Response Criteria

Each hospital is responsible for developing hospital response protocols. Regional data from the Kansas Trauma Registry will be used to analyze current issues and trends with respect to hospital response.

(d)1 Classification of patients by severity (physiological, mechanism, co-morbid factors, etc)

SCKTR will follow "Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago" as a guide for patient classification. Regional data from the Kansas Trauma Registry will be used to analyze issues and trends with respect to classification of patients.

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(d)2 Facility action based upon classification of patients (i.e. Trauma team activation, stabilization/transfer, or admission for observation.)

SCKTR will follow "Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago" as a guide for hospital action based on patient classification. Regional data from the Kansas Trauma Registry will be used to analyze issues and trends with respect to hospital action based upon classification of patients.

Needs Analysis

Designation of trauma facilities is needed. Regional Kansas Trauma Registry data is needed.

Objectives

- Continue to support the Kansas Trauma Program with efforts to provide accurate and timely Kansas Trauma Registry data to the SCKTR and each hospital.
- SCKTR will support the Kansas Trauma Program efforts to implement a hospital designation system.
- SCKTR will follow the "Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago" as a guide for hospital action based on patient classification.

Activities in Progress

- SCKTR volunteers support to the Kansas Trauma Registry. KDHE will continue to provide technical support to hospitals to aid with Kansas Trauma Registry data quality and completeness.

Planned Activities

- SCKTR will continue to support the Kansas Trauma Registry and Kansas Trauma Program. Progress will be monitored.

Long-Term Goals

- An initial plan will be developed once trends are established using accurate regional data.

C(e) Inter-Hospital Transfers

In the SC region inter-hospital transfers and transfer agreements are the responsibility of each hospital. Regional data from the Kansas Trauma Registry will be used to establish a baseline of inter-hospital transfer activity.

(e)1 Identification of patients to be transferred

Identification of patients to be transferred is currently the responsibility of each hospital and SCKTR encourages use of those criteria found in the "Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago".

(e)2 Identification of available patient destinations and criteria for selection (especially for "specialty" patients)

It is currently the responsibility of each hospital. EMSsystem® will be used to assist identification of the available patient destination.

(e)3 Availability of regional facility "800" numbers and coordination of distributing/routing patients

The two Level I facilities have 800 numbers available. SCKTR does not have a regional "800" number.

(e)4 Available means of transporting patients and capabilities

Refer to the C(a)4 Field Triage Guidelines, pp. 12-14 under acknowledgement of pre-hospital care provider resources.

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(e)5 Treatment/stabilization criteria and time guidelines should be outlined

Treatment/stabilization criteria and time guidelines are the responsibility of each hospital in the region. Data from the Kansas Trauma Registry will help to determine the criteria.

(e)6 Written transfer agreements

In the SC region, inter-hospital transfers and transfer agreements are the responsibility of each hospital.

Needs Analysis

SCKTR will use regional data from the Kansas Trauma Registry regarding inter-hospital transfers to determine if transfers are appropriate and timely. A standardized decision scheme for patient destination has not been developed.

Objectives

- Establish a baseline of inter-hospital transfer patient flow using the Kansas Trauma Registry.
- Support the efforts of the Kansas Trauma Program to implement a process for designation of trauma centers.

Activities in Progress

- EMSsystem® implemented and supported.
- SCKTR Trauma Capabilities Assessment completed and needs evaluated.
- SCKTR model field triage guidelines have been drafted.
- The ACT is defining a process for trauma center designation.

Planned Activities

- Education, using the model field triage protocol, will be provided and implementation of the model by individual facilities will be encouraged.
- Input and support for the hospital designation process will be provided to the Kansas Trauma Program and the ACT.
- Baseline knowledge of current patient flow will be evaluated and goals will be established.

Long-Term Goals

- Increased use of model field triage protocol by individual facilities.
- Increased participation by hospitals in the hospital designation process.

C(f) Medical Direction of Pre-hospital

Each of the fifty-two EMS services in the SC region has a Medical Advisor. The Medical Advisor provides “on-line” medical direction (EMS personnel have direct communication with a hospital or physician) for patient care and “off-line” medical direction (EMS personnel do not have direct communication with the hospital or physician). Patient care is directed through the use of written patient care protocols when operating “offline.”

(f)1 Roles/Responsibilities of Medical Advisor

According to KSA 65-6126, each emergency medical service shall have a medical advisor appointed by the operator of the service to review, approve and monitor the activities of the attendants.

(f)2 Medical Advisor Approved Protocols

The local medical society, or alternative as provided by state law, approves all protocols.

Needs Analysis

Medical advisors should be aware of SCKTR issues related to regional trauma plans.

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Objectives

- Encourage medical advisors to participate in SCKTR and plan development.
- SCKTR will provide model protocols for EMS services, if requested.

Activities in Progress

- Planning and development activities are in progress.

Planned Activities

- A plan will be developed to communicate regional trauma plan information to medical advisors.

Long-Term Goals

- All medical advisors will support and participate in the SCKTR.

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Part D - Health Care Facilities (identify the resources within the region)

D(a) Trauma Services

SCKTR supports an inclusive trauma system where access to trauma services is available through every hospital in the region. It is essential, in a regional trauma system encompassing rural areas, for each rural hospital to have a clearly defined role based on its resources and distances between facilities. These factors will determine where the patient receives both initial and definitive care. Every effort should be made to ensure that when the patient is transferred, it would be to the most appropriate hospital the first time. ("Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago".)

A statewide process for designation of trauma services is currently in development.

Needs Analysis

Regional data from the Kansas Trauma Registry is necessary to evaluate and identify needs related to trauma services. SCKTR Trauma Capabilities Assessment should be analyzed for needs and resources related to trauma services.

Objectives

- Obtain accurate and timely regional data to determine trauma service needs.
- Trauma service needs will be identified from accurate data reflective of the region.
- Identify capabilities of the region to determine designation.
- Maintain resources appropriate to designation status.

Activities in Progress

- SCKTR will continue to support the Kansas Trauma Registry and Kansas Trauma Program. Progress will be monitored.

Planned Activities

- SCKTR will determine needs and resources based on the SCKTR Trauma Capabilities Assessment and Kansas Trauma Registry data.
- Based on regional data, SCKTR will pursue resources to address needs.

Long-Term Goals

- Trauma service needs will be identified using accurate data representative of the entire region.
- Every community will have access to trauma services.
- Obtain funding for designation process.

D(b) Regional trauma services

Via Christi St. Francis and Wesley Medical Center are the only ACS verified trauma centers in the region.

Needs Analysis

Regional data from the Kansas Trauma Registry is necessary to evaluate and identify needs related to regional trauma services. SCKTR Trauma Capabilities Assessment should be analyzed for needs and resources related to trauma services. There are facilities in the region capable of obtaining Level III or IV designation. To help this process financial assistance is needed.

Objectives

- Obtain accurate and timely regional data to determine regional trauma service needs.
- Identify capabilities of region to determine Level III or IV candidates.
- Complete a periodic review to determine regional needs and resources.

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Activities in Progress

- SCKTR will continue support of the regional Kansas Trauma Registry and Kansas Trauma Program. Progress will be monitored.

Planned Activities

- Needs and resources will be determined based on the SCKTR Trauma Capabilities Assessment and Kansas Trauma Registry data.
- Based on regional data, SCKTR will pursue resources to address needs.

Long-Term Goals

- Trauma service needs will be identified using accurate regional data.
- Include all hospitals in trauma verification/designation.

D(c) Pediatric trauma services

Via Christi St. Francis and Wesley Medical Center are the only ACS verified centers in the region. See Appendix E for Pediatric Trauma Services available for patients.

Needs Analysis

Regional data from the Kansas Trauma Registry is necessary to evaluate and identify needs related to pediatric trauma services.

Objectives

- On a periodic basis, the Kansas Trauma Registry data and the SCKTR Trauma Capabilities Assessment will be used to analyze pediatric trauma service needs and resources.

Activities in Progress

- SCKTR will continue to support the regional Kansas Trauma Registry and Kansas Trauma Program. Progress will be monitored.

Planned Activities

- Determine needs and resources based on the SCKTR Trauma Capabilities Assessment and Kansas Trauma Registry data.
- Based on regional data, SCKTR will pursue resources to address needs.

Long-Term Goals

- Pediatric trauma service needs will be identified using accurate regional data.

D(d) Trauma Rehabilitation services

Several trauma rehabilitation services are available in the region, located mostly in the Wichita area. SCKTR recognizes rehabilitation is an important component in the complete care of the trauma patient. See Appendix F for a list of trauma rehabilitation services.

Needs Analysis

Regional data from the Kansas Trauma Registry is necessary to evaluate and identify potential needs related to trauma rehabilitation services.

Objectives

- On a periodic basis, Kansas Trauma Registry data and the SCKTR Trauma Capabilities Assessment will be used to analyze trauma rehabilitation service needs and resources.

Activities in Progress

- SCKTR will continue support of the regional Kansas Trauma Registry and Kansas Trauma Program. Progress will be monitored.

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Planned Activities

- SCKTR will determine needs and resources based on the SCKTR Trauma Capabilities Assessment and Kansas Trauma Registry data.
- Based on regional data, SCKTR will pursue resources to address needs.

Long-Term Goals

- Trauma rehabilitation service needs will be identified using accurate data representative of the SC region.

Part E - Evaluation

Statewide reporting systems have much potential to provide information useful in modifying and improving trauma systems. If properly designed, registries can meet several key goals. In addition to evaluating the effectiveness of a trauma system in meeting a community's needs, aggregate data can assist in assessing the appropriateness of trauma standards, developing appropriate trauma prevention strategies, and in assessing the extent of resources needed to adequately support and sustain a trauma care system.

A trauma care system plan must include the ability of the system to monitor its own performance over time and to assess its impact on trauma morbidity and mortality. This requires continual assessment of system operations, demonstration that the system is meeting stated goals, and documentation of system performance. Essential to the system quality management is the ability to measure compliance to standards, document system effectiveness, and to identify quality improvement opportunities.

The ideal trauma care system has an information system that provides for the timely collection of data from all providers in the form of consistent data sets with minimum standards. The information system should be designed to provide system-wide data that allow and facilitate evaluation of the structure, process, and outcomes of the entire system, all phases of care, and their interactions. An important use of this information is to develop, implement, and influence public policy, facilitate and encourage injury prevention strategies, and trauma care research.

E(a) Data Collection

Statewide development and implementation of the Kansas Trauma Registry started in 2001 and SCKTR hospitals actively participate in the Kansas Trauma Registry. The Kansas Department of Health and Environment (KDHE) in the Office of Healthcare Information houses the Kansas Trauma Registry. SCKTR actively monitors and provides assistance to the 30 hospitals in the region with regard to Kansas Trauma Registry training and data reporting. In addition, SCKTR monitors the quality of registry data. Currently, the Kansas Trauma Program provides reports to SCKTR and hospitals regarding data submission and quality. The Kansas Trauma Program does not provide a comprehensive report to SCKTR or hospitals regarding specific data elements. Hospitals may use the registry to generate reports unique to their facilities and the Kansas Trauma Program encourages this practice for PI purposes.

As of December of 2004, twenty-six of the thirty facilities were submitting trauma data to the Kansas Trauma Registry.

Needs Analysis

Reliable regional data from the Kansas Trauma Registry is needed. Comprehensive Kansas Trauma Registry data reports should be provided to SCKTR and hospitals.

Objectives

- The Kansas Trauma Registry data will be valid and reliable.
- All hospitals will report Kansas Trauma Registry data.
- Data quality and consistency will improve.
- Benchmarking against the National Trauma Data Bank (NTDB) will occur.
- Reports including all state required Kansas Trauma Registry data elements will be supplied to individual hospitals and SCKTR.
- Kansas Trauma Registry data will be used to establish a regional trauma system baseline of information.
- Develop a policy to track patients through multiple agencies for more accurate data collection.

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Activities In Progress

- SCKTR monitors hospital data reporting and provides assistance to facilities that have not reported to increase compliance. SCKTR also monitors data quality and completeness consulting with the Kansas Trauma Program on strategies to improve data.
- SCKTR actively works with the Kansas Trauma Program to increase the amount of information reported to SCKTR and hospitals following data submission to complete the feedback loop.
- Partnering with non-reporting hospitals to improve data reporting, to include three Kansas Trauma Registry educational meetings.

Planned Activities

- SCKTR will continue to play an active role in monitoring and supporting hospitals with data reporting and quality.
- SCKTR will request information from the Kansas Trauma Registry to establish a baseline of the current regional trauma system.

Long-Term Goals

- One hundred percent of hospitals and EMS agencies in SCKTR will report Kansas Trauma Registry data.

E(b) Regional quality improvement

The Kansas Trauma Program recommends a regional quality improvement plan. A number of parameters have been identified to analyze as a region on a routine basis. The Kansas Trauma Registry and EMSsystem® data will be used to accomplish evaluation.

Ongoing quality improvement program is performed at the hospital level. A regional trauma quality improvement process has yet to be established.

Needs Analysis

There is a need for policy related to regional performance improvement activities based on Kansas Trauma Registry data and EMSsystem® data.

Objectives

- SCKTR will continue to support the regional Kansas Trauma Registry and the Kansas Trauma Program. Progress will be monitored.
- SCKTR will assist and support the efforts of the Kansas Trauma Program to develop a regional performance improvement program.

Activities In Progress

- Currently, SCKTR monitors hospital data reporting and provides assistance to hospitals that have not reported data to increase compliance. SCKTR also monitors data quality and completeness consulting with the Kansas Trauma Program on strategies to improve data.
- SCKTR actively works with the Kansas Trauma Program to increase the amount of information reported to the hospitals following data submission in order to complete the feedback loop.

Planned Activities

- SCKTR will continue to play an active role in monitoring and supporting hospitals with data reporting and quality issues.
- SCKTR will work with the Kansas Trauma Program to define a regional performance improvement process.
- SCKTR will work with the Kansas Trauma Program to develop non-discoverable language in policy development.

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Long-Term Goals

- SCKTR, in collaboration with the Kansas Trauma Program, will develop a performance improvement process and begin training and implementation in the region.
- Standardized and comprehensive Kansas Trauma Registry reports will be provided to SCKTR.
- Policies will be established for regional performance improvement.

E(c) Feedback loop to all aspects of regional operations

According to the "Committee on Trauma (1999), *Resources for Optimal Care of the Injured Patient: 1999*, American College of Surgeons, Chicago", closing the loop (result) means performance improvement efforts have the desired effect as determined by continuous evaluation. Demonstration of the continuous pursuit of performance improvement is essential to all trauma programs. The state has plans to develop a formal process by which information can be provided that is in compliance with state and federal regulations that will provide SCKTR with a feedback loop to all aspects of regional operations.

Needs Analysis

SCKTR needs to develop a feedback and loop closure process that will improve the regional trauma system.

Objectives

- SCKTR, in collaboration with the Kansas Trauma Program, will develop a performance improvement process and begin training and implementation in the region.
- Standardized and comprehensive Kansas Trauma Registry reports will be provided to SCKTR.
- Policies will be established for regional performance improvement.

Activities in Progress

- SCKTR volunteers support to the Kansas Trauma Registry. KDHE will continue to provide technical support to hospitals to aid with Kansas Trauma Registry data quality and completeness.

Planned Activities

- SCKTR will request specific reports from the statewide Kansas Trauma Registry to address regional plan objectives.

Long-Term Goals

- A regional performance improvement process will be developed and implemented.

E(d) Process for reviewing data filters and specific occurrences as they arise

Currently, performance improvement activities occur in each hospital. Regional performance improvement activities will occur as the regional performance improvement plan develops. For additional information, please refer to E(b) Regional quality improvement, pp. 23-24 for additional information.

Needs Analysis

SCKTR needs to develop data filters that will trigger a case review, which will allow feedback, and loop closure process that will improve the regional trauma system.

Objectives

- Implement filters to initiate the review process.
- Standardized mechanism for reviewing data provided to SCKTR will be established.
- Policies will be established for regional performance improvement.
- Develop a subcommittee of SCKTR to review and follow-up.

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Activities in Progress

- SCKTR supports the Kansas Trauma Registry by providing technical assistance to hospitals regarding Kansas Trauma Registry data quality and reporting issues.

Planned Activities

- SCKTR will request specific reports from the statewide Kansas Trauma Registry to address regional plan objectives.

Long-Term Goals

- A regional performance improvement process will be developed and implemented.

Part F - Injury Prevention and Control

F(a) Identification of resources within the region to address identified risk areas

Complete information is not available for the number or types of injury that occur in Kansas leaving the region with incomplete data to effect targeted injury prevention efforts. Currently, most injury prevention initiatives are not driven by regional injury data, but by territorial agendas or injury projections from national organizations such as the Centers for Disease Control (CDC) and state death data.

Public and private agencies provide injury prevention services in the SC region. Kansas SAFE KIDS Coalitions, and chapters, KHP, Kansas Department of Transportation (KDOT), and county health departments offer injury prevention programs and promote public education. Prevention programs are offered at the discretion of organizations in the region; however, a centralized resource for injury prevention programs and activities is not available leaving the system fragmented. Prevention programs are under funded and competition for the limited dollars occur between programs and organizations sharing similar, if not the same, goals

Needs Analysis

There is a lack of regional injury data to drive prevention efforts. However, state and national data reveal that motor vehicle crashes are a leading killer of Kansans. A centralized source of prevention programs is not available leaving agencies within the region unaware of available injury prevention programs and how to access them. A regional injury prevention plan, using registry data to address injuries, has not been developed. Limited funds are available for prevention efforts and competition exists between organizations sharing the same goals.

Based on trauma data from the regional trauma centers, the elderly were identified as an at risk population for falls and burns.

Objectives

- Identify state and local partners for collaboration.
- Work with state and local partners to develop a centralized prevention program database.
- Use Kansas Trauma Registry data to develop a regional injury prevention plan.
- Develop goals specifically addressing Motor Vehicle Crashes (MVCs) and falls by age group.
- Develop a policy platform that addresses regional support for legislative activity for child passenger safety.

Activities In Progress

- SCKTR has started to identify and work with local and state partners to develop a prevention program database and website.
- SCKTR has started discussion with the Kansas Trauma Program regarding use of Kansas Trauma Registry data to develop a regional injury prevention plan.
- SCKTR is collaborating with Via Christi on a prevention project for elderly fall and burn prevention, which includes train the trainer approach with the "Remembering When" curriculum.
- SCKTR has started to identify and work with local and state partners. SCKTR has partnered with the Emergency Medical Services for Children program (EMSC) to develop a prevention programs database and website.

Planned Activities

- SCKTR plans to collect and distribute data regarding available injury prevention programs in the region through a centralized database/website.
- Continued monitoring of Kansas Trauma Registry data to develop an injury prevention plan will continue. Plan development will follow.
- Specific goals will be developed to address Motor Vehicle Crashes (MVCs) and falls by age group.

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Long-Term Goals

- The SC region will be aware of, and actively use, the injury prevention database as a method of reporting and receiving information regarding injury prevention programs and events.
- A regional injury prevention plan will be developed in conjunction with regional partners using Kansas Trauma Registry data. Consequently, programs will be implemented from a comprehensive plan. A policy platform will be updated and approved on an annual basis.
- The Kansas Trauma Registry data will reveal education needs for reduction in MVCs and falls by age group.

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Part G - Human Resources

G(a) Identify gaps in education and training

Education

The Kansas Trauma Program provided funding for trauma education from 2002 to 2004. The funding subsidized three trauma courses for physicians and mid-level practitioners, nurses, and EMS personnel that included Advanced Trauma Life Support (ATLS), Trauma Nurse Core Course (TNCC), and Pre-Hospital Trauma Life Support (PHTLS). In June 2004, the trauma education program was discontinued due to lack of funding. Currently, the aforementioned courses are offered at various facilities throughout the region. An additional course developed by the ACS has been provided in the region; the Rural Trauma Team Development Course (RTTDC) is designed for rural facilities that may not have the resources of a larger trauma center, but still cares for the occasional critically injured patient. In 2003, SCKTR conducted a needs assessment survey that indicated a need for trauma education in rural areas for EMS personnel, nurses and physicians.

Needs Analysis

There is a major lack of funding and resources for trauma education. The Kansas Trauma Program does not require trauma education for all providers who treat trauma patients. Staffing issues exist in rural and frontier areas making it challenging for providers to receive education. Technology for education initiatives is not available to all facilities in the region. Based on the 2003 SCKTR Needs Survey, SCKTR has established PHTLS, TNCC, and the ATLS training as priority education programs needed in the region. A community education plan regarding SCKTR, trauma center verification/designation, and the regional trauma plan needs to be developed and implemented.

Objectives

- SCKTR will support efforts to increase trauma education funding by assessing available resources and grant opportunities.
- SCKTR will assess ways to make education more accessible to rural and frontier areas and provide information to the Kansas Trauma Program.
- SCKTR will support education technology and its use throughout the region.
- SCKTR will periodically review regional education needs. These may include the following: PHTLS, TNCC, ATLS and RTTDC.

Activities In Progress

- SCKTR communicates on an ongoing basis with Kansas Trauma Program and the ACT regarding education-funding needs.
- SCKTR is planning a minimum of two PHTLS courses in 2005.
- SCKTR participates in the statewide prevention/education centralized database development planning committee.

Planned Activities

- SCKTR, in conjunction with all RTCs, plans to approach local lawmakers and legislators regarding funding issues.
- Include RTTDC throughout the region.
- Partner with South Central Kansas Hospital Preparedness and the regional EMS council to accomplish activities.

Long-Term Goals

- An increase in providers educated in trauma care will be recognized.
- SCKTR will become a recognized resource for trauma education and consultation.

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G(b) Community Education

Educating a diverse group of healthcare organizations and professionals regarding the benefits of the trauma system is key to improving the system. Widespread provider and community support for the trauma system is necessary for system improvement.

Needs Analysis

Healthcare organizations and professionals need information regarding SCKTR mission and purpose, state trauma center designation, SCKTR Field Triage Protocol and the regional trauma plan.

Objectives

- Increase awareness in the healthcare community of SCKTR, trauma center verification/designation, SCKTR Field Triage Protocol and the regional trauma plan.

Activities in Progress

- Plan development.

Planned Activities

- SCKTR will develop a plan to address community education needs regarding the regional trauma system.

G(c) Develop process for facilitating number of trauma education programs provided within the region to meet any identified needs.

Currently, trauma education is provided at the discretion of each organization. SCKTR has plans to sponsor several trauma education courses throughout the region.

Needs Analysis

Education is not centrally organized or provided based on regional needs identified through accurate regional data.

Objectives

- Encourage and support accurate regional data reports regarding education from Kansas Trauma Program and the trauma registry.
- Complete two PHTLS courses in the rural areas of the region.

Activities in Progress

- SCKTR is planning two PHTLS courses in 2005.

Planned Activities

- SCKTR will develop a coordinated plan to address education.
- Support the EMSC centralized database.

Long-Term Goals

- Have a centralized area of ongoing educational opportunities.

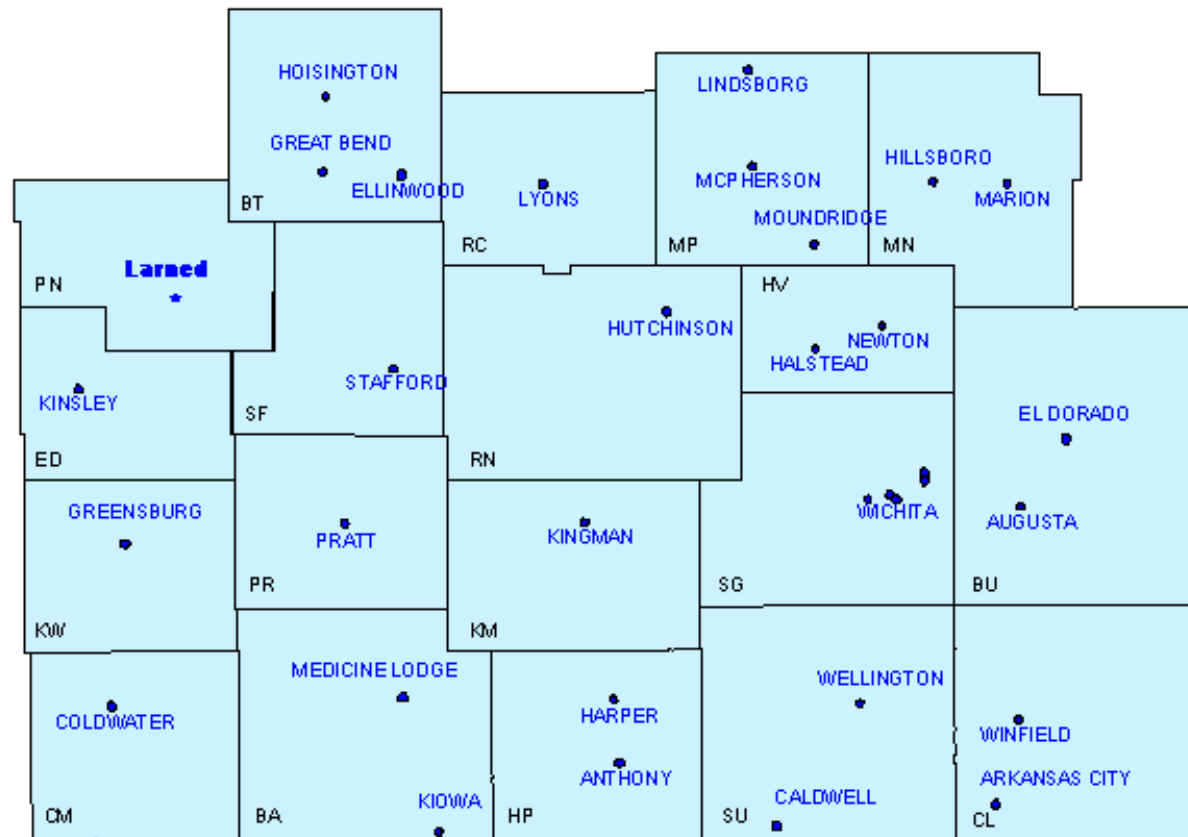
Appendix A

South Central Trauma Region Map

SC Kansas Hospital Cities

Counties:

BA	Barber
BT	Barton
BU	Butler
CM	Comanche
CL	Cowley
ED	Edwards
HP	Harper
HV	Harvey
KM	Kingman
KW	Kiowa
MN	Marion
MP	McPherson
PN	Pawnee
PR	Pratt
RN	Reno
RC	Rice
SG	Sedgwick
SF	Stafford
SU	Sumner



Prepared 04/05/05



Appendix B

SCKTR Member Organizations

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Reeh	Michael		104 North Washington	Hillsboro	KS	67063	620-947-3100	reeh@wwwwebservice.net
Lowe	Anderson	Argonia EMS Service	122 North Main	Argonia	KS	67004-0035	620-435-6144	
Wilson	Dawn	Arkansas City Fire/EMS	115 South "D" Street	Arkansas City	KS	67005	620-441-4430	
Long	R. Dale	Arkansas City Fire/EMS Dept.	115 So. "D" Street	Arkansas City	KS	67005-2622	620-441-4430	daleat911@hotmail.com
McNamar	Jerry	Barber County Ambulance Service	810 Drumm Street	Kiowa	KS	67070-1699	620-825-4131	
Prilliman	Jeff	Barber County Health	408 North Adams	Medicine Lodge	KS	67104	620-886-3227	prilliman@sctelecom.net
Roberson	Faith	Barton County Health	1300 Kansas Suite B	Great Bend	KS	67530	620-793-1902	froberson67530@hotmail.com
Crowe	Debra	Belle Plaine EMS	401 North Merchant	Belle Plaine	KS	67013	620-488-3433	
Kakubzhola	Joseph	Boeing Fire Department	3801 South Oliver	Wichita	KS	67277-7730	316-526-4168	
Clutts	John	Burrton Ambulance Department	205 No. Burrton Avenue	Burrton	KS	67020	620-463-4545	
Diehl	Curtis	Butler County EMS	701 North Haverhill Road	El Dorado	KS	67010	316-321-9260	
Helferich	Grant	Butler County EMS	701 North Haverhill Road	El Dorado	KS	67042	316-321-9260	ghelferich@bucoks.com
Megredy	Joe	Butler County EMS	701 North Haverhill Road	El Dorado	KS	67042	316-321-9260	jmegredy@bucoks.com
Borger	Carol	Butler County Health	206 North Griffith, Suite B	El Dorado	KS	67042	316-321-3400	cborger@bucoks.com
Baise	Vida	Canton Ambulance Service	201 South Main	Canton	KS	67428-0524	620-628-4615	ems@canton.com
Enns	Terry	Canton Ambulance Service	P. O. Box 441	Canton	KS	67428	620-628-4721	
Sommers	Thomas	Central Kansas Medical Center	3515 Broadway	Great Bend	KS	67530-3633	620-792-2511	
Mostrom	Kathy	City of Burdett EMS	207 Elm Street	Burdett	KS	67523-0286	620-525-6279	burdems@gbta.net
Hubbard	Douglas	Claflin Ambulance Service Association	309 West Front	Claflin	KS	67525	620-587-3498	

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Demel	Brandi	Clara Barton Hospital	250 West 9th	Hoisington	KS	67525	620-653-2114	bdemel@clarabarton.hpmin.com
Turnbull	James	Clara Barton Hospital	250 West Ninth	Hoisington	KS	67544-1706	620-653-2114	
Whitlow	Wayland	Clearwater EMS	Box 453	Clearwater	KS	67026	620-584-2311	
Adams	Brian	Comanche County Ambulance Service	401 N. Central	Coldwater	KS	67029-0055	620-582-2126	
Miller	Janice	Comanche County Emergency Service	Box 537	Protection	KS	67127	620-622-4264	jmillier@kans.com
Malone	Beverly	Comanche County Hospital	HC65, Box 8A	Coldwater	KS	67029	620-582-2144	
Zimmerman	Nancy Ann	Comanche County Hospital	HC56, Box 8A	Coldwater	KS	67029	620-582-2144	zimmerman@ourtownusa.net
Haehn	Colleen	Conway Springs Volunteer	310 West Spring Avenue	Conway Springs	KS	67301-0413	620-456-2345	
Habiger	Deanna	Edwards County Ambulance	620 West 8th Street	Kinsley	KS	67547	620-659-3621	ems@cch.kscoxmail.com
Mathes	Duane	Edwards County Health Department	1021 Marsh Avenue	Kinsley	KS	67547	620- 659-2789	mathes@midway.net
Alderfer	Kim	Edwards County Hospital and Health Center	620 W. 8th	Kinsley	KS	67547-0099	620-659-3621	
Haneke	David	Ellinwood District Hospital	605 N. Main	Ellinwood	KS	67526-1440	620-564-2549	dhaneke@gpoe.org
Glenn	Debbie	Ellinwood EMS	P. O. Box 278	Ellinwood	KS	67526	620-564-2408	ellinwoodems@cityofellinwood.com
Keltner	Andy	Ellinwood EMS	412 East Fifth	Ellinwood	KS	67526	620-564-2044	andykeltner@ellinwood.com
Cook	Ted	Emergency Services of Kansas	301 North Main	Newton	KS	67114	316-282-9619	ktcookin@cox.net
Morford	Ron	Emergency Services of Kansas	P. O. Box 507	Newton	KS	67114-0587	316-282-9614	rmorford@emerphys.com
Williams	Patricia	Florence Ambulance Service	100 E. Fourth	Florence	KS	66851	620-382-7032	
Zogelman	Scott	Florence Ambulance Service	100 East Fourth	Florence	KS	66851	620-382-7032	
Napolitano	Michael	Great Bend Fire/EMS Dept	1205 Williams	Great Bend	KS	67530	620-793-4140	
Voss	Eric	Halstead EMS	303 Main	Halstead	KS	67056	316-835-3381	ems@halsteadks.com
Gronau	Wendy	Halstead Fire/EMS	303 Main	Halstead	KS	67056	316-835-2606	ems@halsteadks.com
Loreg	Mike	Harper County EMS	123 N. Jennings	Anthony	KS	67003	620-843-5132	

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
McCray	Cindy	Harper County Hospital District #6	1101 E. Spring Street	Anthony	KS	67003-2122	620-842-5111	
Rathseber	Theresa	Harper County Hospital District #6	1101 E. Spring	Anthony	KS	67003	620- 842-5111	
Zelenak	Jozef	Harper County Hospital District #6	1101E Spring	Anthony	KS	67003	620- 842-5111	
Bellar	Ralph	Harper Hospital District #5	1019 Central	Harper	KS	67058	620-896-7313	harpermed@cyberlodge.com
Cartmill	Dan	Harper Hospital District #5	1204 Maple	Harper	KS	67058-1438	620-896-7324	hhd5ceo@ink.org
Ediger	Martha	Harper Hospital District #5	1204 Maple	Harper	KS	67058	620-896-7324	edigerm@hotmail.com
Bourlard	Terry	Harvey County Health Department	316 Oak	Newton	KS	67114	316-283-1637	tbourlard@harveycounty.com
Troyer	Tony	Haven Community EMS	102 S. Kansas Avenue	Haven	KS	67543	620-465-3618	
Buller	Russell	Hesston Emergency Services	115 East Smith	Hesston	KS	67062	620-327-4412	
Knak	Joann	Hillsboro Ambulance	702 West Grand	Hillsboro	KS	67063	620-947-3545	mknak@wwwwebservice.net
Ryan	Michael	Hillsboro Community Hospital	701 South Main Street	Hillsboro	KS	67063	620-947-3114	mryan@hcmcks.org
Brown	Brenda	Hillsboro Community Medical Center	701 South Main Street	Hillsboro	KS	67063	620-947-3114	bbrown@hcmcks.org
Pata	Mark	Hoisington Ambulance Service	202 E. Broadway	Hoisington	KS	67544	316-653-4150	
Myers	Donna	Hospital District #1 Rice County	PO Box 828	Lyons	KS	67554	620-257-5773	dmyers@rch-lyons.com
Clarke	Scott	Hutchinson Clinic	2101 N Waldron	Hutchinson	KS	67502	620-669-2580	sfz750@aol.com
Norrell	Mark	Hutchinson Hospital	1701 East 23rd Avenue	Hutchinson	KS	67502-1105	620-665-2009	norrellm@hhosp.com
Schmidt	Gene	Hutchinson Hospital	1701 East 23rd Avenue	Hutchinson	KS	67502-1105	620-665-2000	schmidtg@hhosp.com
White	Beverly	Hutchinson Hospital	1701 East 23rd Avenue	Hutchinson	KS	67502	620-665-2319	whiteb@hhosp.com
Miller	Randall	Hutchinson Hospital/Reno County EMS	1701 East 23rd	Hutchinson	KS	67502	620-665-2120	millerr@hhosp.com
Schrag	Dave	Hutchinson Hospital/Reno County EMS	1701 East 23rd Avenue	Hutchinson	KS	67502	620-665-2120	

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Beech	Randall	Kingman Community Hospital	750 West "D" Avenue	Kingman	KS	67068	(620) 532-3147	
Jarmer	Rogene	Kingman Community Hospital	75 W "D" Avenue	Kingman	KS	67068	620-532-3147	nvhsco@ink.org
Hart, III	Ira	Kingman EMS	332 North Main Street	Kingman	KS	67068	620-532-5624	kingmanems@terraworld.net
Smith	Tim	Kiowa County EMS	501 South Walnut	Greensburg	KS	67054	620-723-3341	
Colclazier	Mary	Kiowa County Memorial Hospital	501 S. Walnut	Greensburg	KS	67054-0616	620-723-3341	mcolclazier@kcmh.net
McNamar	Patricia	Kiowa District Hospital	810 Drumm St.	Kiowa	KS	67070	620-825-4131	rivervue@sctelcom.net
Stranathan	Sidney	Kiowa District Hospital	810 Drumm Street	Kiowa	KS	67070	620-825-4131	
Littrell	Tracy	Lindsborg Community Hospital	605 W. Lincoln	Lindsborg	KS	67456	785-227-3308	or@lindsborghospital.org
Lundstrom	Gregory	Lindsborg Community Hospital	605 W. Lincoln	Lindsborg	KS	67456-2328	785-227-3308	gregl@lindsborghospital.org
Johnson	Daryl	Lindsborg EMS	PO Box 70	Lindsborg	KS	67456	785-227-2988	drjemsdir@yahoo.com
Larsen	Karen	Marion County EMS	405 North Walnut	Peabody	KS	66866	620-983-2064	klarsen@southwind.net
Mayfield	Sondra	Marion County Health Department	230 East Main	Marion	KS	66861	620-382-2550	
Buffington	Max	Marquette Ambulance Service	428 North Washington	Marquette	KS	67464	785-546-2218	
Easter	Randy	McPherson EMS	315 West Fourth	McPherson	KS	67460	620-241-2250	randye@mcphersonmemorial.org
Burns	Kathryn	Medicine Lodge Memorial Hospital	710 North Walnut	Medicine Lodge	KS	67104	620-886-3771	nursekay@hotmail.com
White	Kevin	Medicine Lodge Memorial Hospital	710 North Walnut	Medicine Lodge	KS	67104-1019	620-886-3771	
White	Kevin	Medicine Lodge Memorial Hospital Ambulance	710 North Walnut	Medicine Lodge	KS	67104	620-886-3771	
Gehring	Terri	Memorial Hospital	1000 Hospital Drive	McPherson	KS	67460-2321	620-241-2250 x 138	terrigan@mcphersonmemorial.org
Patrick	Daryl	Memorial Hospital	1000 Hospital Drive	McPherson	KS	67460-2321	620-241-2250 x625	daryl@mcphersonmemorial.org

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Watson	Richard	Memorial Hospital	1000 Hospital Drive	McPherson	KS	67460-2321	620-241-2250 x620	
Johnson	Doyle	Mercy Hospital, INC.	218 East Pack Street	Moundridge	KS	67107-0180	620-345-6391	
LeBaron	Brenda	Midwest Lifeteam	2134 East 77th Street North	Valley Center	KS	67147	316-215-4573	
Justice	Robin	Midwest Lifeteam	3612 North Webb Street	Wichita	KS	67226	405-478-0538	
Rudd	Jayne	Midwest LifeTeam	3612 North Webb Road	Wichita	KS	67226	316-636-9755	mjrdudd@cox.net
Williams	Frank	Midwest LifeTeam	3512 North Webb Road	Wichita	KS		316-636-9781	rescue1@cox.net
Ratzlaff	Kerry	Moundridge EMS	PO Box 28	Moundridge	KS	67107-0028	620-345-8246	
Eisenhauer	Bernice	Mt. Hope Community Ambulance Service	Box 114 East Main	Mt. Hope	KS	67108	316-667-2471	
Mead	Troy	Mulvane Emergency Services	5261 South Madison	Wichita	KS	67216	316-789-8366	micts@aol.com
Patterson	Judith	Mulvane EMS	910 East Main	Mulvane	KS	67110	316-777-1551	
Willis	Mark	Newton KS Fire/EMS Department	200 East Third	Newton	KS	67114	316-284-6060	markwillis@newtonfireems.com
Duerksen	Lynette	Newton Medical Center	600 Medical Center Drive	Newton	KS	67114	316-283-2700	
Jewett	Mitch	Newton Medical Center	600 Medical Center Drive	Newton	KS	67114	316-804-6059	mitch.jewett@newmedctr.org
Kelly	Steven	Newton Medical Center	600 Medical Center Drive	Newton	KS	67114-0308	316-283-2700	
Tiller	Gary	Ninnescah Valley Health Systems, Inc.	750 Avenue D West	Kingman	KS	67068-0376	620-532-3147	nvhsseo@ink.org
Smith	Jan	Norwich Ambulance Service	226 South Main	Norwich	KS	67118	620-478-2221	
Branaman	Kirk	Pratt County EMS	1001 East First Street	Pratt	KS	67124	620-672-41320	ems@prattcounty.org
McManaman	Mark	Pratt County EMS	1001 East First	Pratt	KS	67124	620-672-4130	emergencymanagements@prattcounty.org

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Larrison	Jenny	Pratt Regional Medical Center	200 Commodore	Pratt	KS	67124	620-450-1229	jlarrison@prmc.org
Lindsey	Barb	Pratt Regional Medical Center	200 Commodore	Pratt	KS	67124	620-450-1173	blindsey@prmc.org
Page	Susan	Pratt Regional Medical Center	200 Commodore	Pratt	KS	67124-3099	620-672-7451	spage@prmc.org
Westerman	Jennifer	Pratt Regional Medical Center	200 Commodore	Pratt	KS	67124	620-450-1347	jwesterman@prmc.org
Yeatch	Deborah	Pratt Regional Medical Center	317 Garfield	Pratt	KS	67124	620-450-1130	pratter@prmc.org
Forbes	Jerree	Region III EMS/HCC	2305 Marge Street	Hutchinson	KS	67502	800-289-3501	forbessj@hutchcc.edu
Hickman	Robert	Reno County Health Department	209 West 2nd	Hutchinson	KS	67501	620-694-2900	bob.hickman@renogov.com
Theriot	Judy	Reno County Health Department	207 West Second	Hutchinson	KS	67501	620-694-2900	judy.theriot@renocounty.gov
David	Terry	Rice County EMS	1488 West Highway 56	Lyons	KS	67554	620-257-5200	david27@peoplepc.com
Schlotterback	Mathew	Rice County Hospital	1221 West Noble	Lyons	KS	67554	620-257-5124	
Mullen	Robert	Rice County Hospital District #1	619 South. Clark	Lyons	KS	67554-0828	620-257-5173	bmullen@rch-lyons.com
Chavez	Antonio	Sedgwick Ambulance Service (City of)	511 North Commercial	Sedgwick	KS	67135	316-772-5151	
Mauk	Dennis	Sedgwick County EMS	1015 Stillwell	Wichita	KS	67213	316-660-7972	dmauk@sedgwick.gov
Pollan	Thomas	Sedgwick County EMS	1015 Stillwell	Wichita	KS	67213	316-660-7994	
Martin	Pamela	Sedgwick County Health Department	1900 East 9th Street	Wichita	KS	67214	316-660-7324	pmartin@sedgwick.gov
Jirinec	Joseph	South Center Kansas RMC	216 W. Birch	Arkansas City	KS	67005-1107	620-442-2500	
Bergling	Richard	St. Joseph Memorial Hospital	923 Carroll Avenue	Larned	KS	67550	620-285-3161	
Moffitt	Jan	St. Luke's Hospital & Living Center	1014 East Melvin	Marion	KS	66861	620-382-2177	spunkster48@yahoo.com
Tompkins	Doris	Stafford County EMS	636 East. Fourth Avenue	St. Johns	KS	67576-1815	620-549-3765	schd@stjohnks.com
Thompkins	Doris	Stafford County Health	610 E First Street	St. John	KS	67576	620-549-3504	schd@stjohnks.com
Minnis	Vernon	Stafford District Hospital	PO Box 190	Stafford	KS	67578-0190	620-234-5221	

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Newell	Terry	Stafford District Hospital	P. O. Box 190	Stafford	KS	67578	620-234-5221	tnewell@sdh4.org
Arnold	Dan	Sumner County Health	217 W. 8th	Wellington	KS	67152	620-326-2774	
Kolarik	Marty	Sumner County Hospital District #1	601 South Osage	Caldwell	KS	67022	316-845-6492	martyk@cox.net
Watson	Virgil	Sumner County Hospital District #1	601 South Osage	Caldwell	KS	67022-1654	620-845-6492	
Young	Sherrana	Sumner County Hospital District #1 Ambulance Service	601 South Osage	Caldwell	KS	67022	620-845-6492	
Williams	Raymond	Sumner Regional Medical Center	1323 North. A Street	Wellington	KS	67152-4350	620-326-7451	
Goebel	Cecilia	Susan B. Allen Memorial Hospital	720 West Central	El Dorado	KS	67042	316-322-4577	cgoebel@sbamh.org
Nikkel	Robin	Susan B. Allen Memorial Hospital	720 W. Central	El Dorado	KS	67042	316-322-4500	rmitchell@sbamh.org
Wilson	Jimmie	Susan B. Allen Memorial Hospital	720 W. Central Avenue	El Dorado	KS	67042-2112	316-321-3300	
Princ	Cindy	Via Christi Critical Care Transport	929 North St. Francis	Wichita	KS	67214	316-268-5048	cindy_princ@via-christi.org
Kranz	Jack	Via Christi Regional Medical Center	6706 East Castleton Road	Haven	KS	67543	620-465-3486	jackkranz@hotmail.com
Bell	Alice	Via Christi Regional Medical Center	929 North St. Francis	Wichita	KS	67214	316-268-6890	alice_bell@via-christi.org
Gumm	Rita	Via Christi Regional Medical Center	929 North St. Francis	Wichita	KS	67214	316-268-8048	rita_gumm@via-christi.org
Hill	Kris	Via Christi Regional Medical Center	929 North St. Francis	Wichita	KS	67214	316-268-5047	Kris_Hill@via-christi.org
Smith	R.S.	Via Christi Regional Medical Center	929 North St. Francis	Wichita	KS	67214	(316) 268-5990	flysurge@aol.com
Thomas	Bruce	Via Christi Regional Medical Center	929 North St. Francis	Wichita	KS	67214		
Hellard	Bill	Wellington Fire/EMS Department	200 North C Street, Suite 200	Wellington	KS	67152	620-326-7443	wfd206@sutv.com

South Central Kansas Regional Trauma System Plan

Last Name	First Name	Organization	Address	City	State	Zip Code	Phone Number	E-Mail
Lloyd	John	Wellington Fire/EMS Department	200 North C Street, Suite 200	Wellington	KS	67152	620-326-7443	
Scott	Don	Wellington Fire/EMS Department	200 North C Street, Suite 200	Wellington	KS	67152	620-326-7443	wfd202@sutv.com
Ebertowski	Sue	Wesley Medical Center	550 North Hillside	Wichita	KS	67214	(316) 962-2050	susan.ebertowski@wesleymc.com
Hunt	Diane	Wesley Medical Center	3234 E. Murdock	Wichita	KS	67208	316-962-6222	DhuntMD@aol.com
Lippoldt	Diana	Wesley Medical Center	550 North Hillside	Wichita	KS	67214	316-962-7277	Diana.Lippoldt@wesleymc.com
Nevill	David	Wesley Medical Center	550 North Hillside	Wichita	KS	67214-4976	316-962-7277	
Waswick	William	Wesley Medical Center & SFRMC Burn Center	3243 East Murdock	Wichita	KS	67208	316-865-0224	billw7283@aol.com
Powers	Greg	William Newton Hospital	1300 East Fifth Avenue	Winfield	KS	67156	620-221-2300	
Vaught	Richard	William Newton Hospital	1300 East Fifth Avenue	Winfield	KS	67156-2407	620-221-2300	
Wehner	Treasure	William Newton Hospital	1300 East Fifth Avenue	Winfield	KS	67156	(620) 221-3350	
Elliott	John	Winfield Area EMS	1300 East Fifth Avenue	Winfield	KS	67156	620-221-2300	
Wasson	Dale	Winfield Area EMS	1300 East Fifth Avenue	Winfield	KS	67158	620-221-2300	ems@wnmh.org

Appendix C

**Frequency and
EMD Centers in SC Kansas Region**

South Central Kansas Regional Trauma System Plan

	Description					Dispatch Band						Operational Band					
	Fire	EMS	Law Enforcement	Hospital	Other	CB	FM	VHF	UHF	800	Other	CB	FM	VHF	UHF	800	Other
Frequency	158	81	99	0	38	0	1	191	86	41	8	0	1	184	78	48	6
Percent	42%	22%	26%	0%	10%	0%	0%	58%	26%	13%	2%	0%	0%	58%	25%	15%	2%

The frequencies listed above are only percentages.

ARKANSAS CITY POLICE DEPARTMENT P.O. BOX 778 ARKANSAS CITY, KS 67005	BARBER COUNTY SHERIFF'S OFFICE 124 E. WASHINGTON MEDICINE LODGE, KS 67104
BARTON COUNTY EMERGENCY COMMUNICATIONS P.O. BOX 1354 GREAT BEND, KS 67530	BUTLER COUNTY 911 COMMUNICATIONS 121 S. GORDY EL DORADO, KS 67042
COMANCHE COUNTY SHERIFF'S OFFICE P.O. BOX 16 COLDWATER, KS 67029	EDWARDS COUNTY SHERIFF'S OFFICE P.O. BOX 271 KINSLEY, KS 67547
HARPER COUNTY SHERIFF'S OFFICE 115 E. STEADMAN ANTHONY, KS 67003	HARVEY COUNTY COMMUNICATIONS CENTER P.O. BOX 687 NEWTON, KS 67114
HUTCHINSON/RENO COUNTY EMERGENCY COMM. 210 W. 1ST AVE. HUTCHINSON, KS 67501	KINGMAN COUNTY SHERIFF'S OFFICE 120 N. SPRUCE ST. KINGMAN, KS 67068
MARION CO. EMERGENCY COMM. CENTER P.O. BOX 242 MARION, KS 66861	MCPHERSON COUNTY E-911 COMM. CENTER 1177 W. WOODSIDE MCPHERSON, KS 67460
PAWNEE COUNTY SHERIFF'S OFFICE 116 W. 8TH ST. LARNED, KS 67550	PRATT POLICE DEPARTMENT 303 S. OAK PRATT, KS 67124
RICE COUNTY SHERIFF'S OFFICE 1482 US HWY 56 LYONS, KS 67554	SEDGWICK COUNTY EMERGENCY COMM. 535 N. MAIN, ROOM 6 WICHITA, KS 67203
STAFFORD COUNTY SHERIFF'S OFFICE 209 N. BROADWAY SAINT JOHN, KS 67576	SUMNER COUNTY E911 COMM. CENTER 501 N. WASHINGTON WELLINGTON, KS 67152
WINFIELD POLICE DEPARTMENT 812 MILLINGTON ST. WINFIELD, KS 67156	

Appendix D

Field Triage Guidelines

Trauma Patient Field Protocol

The purpose of this model protocol is to develop a standard method of field decision-making and communication in regard to trauma patients for all pre-hospital services.

This model protocol assumes each pre-hospital service has the following capabilities or uses the following standard guidelines:

1. The pre-hospital agency uses the National Standard Triage Color Code System (see Table 3)
2. The pre-hospital agency's dispatch center or medical direction utilizes the EMSsystem® to monitor availability of all receiving hospitals capable of treating trauma patients
3. The pre-hospital agency utilizes the regional trauma alert method to notify the receiving trauma facility of patient information
4. The pre-hospital agency utilizes Glasgow Coma Scale in assessing trauma adult patients and Pediatric Coma Scale for pediatric patients (see Tables 1 and 2)

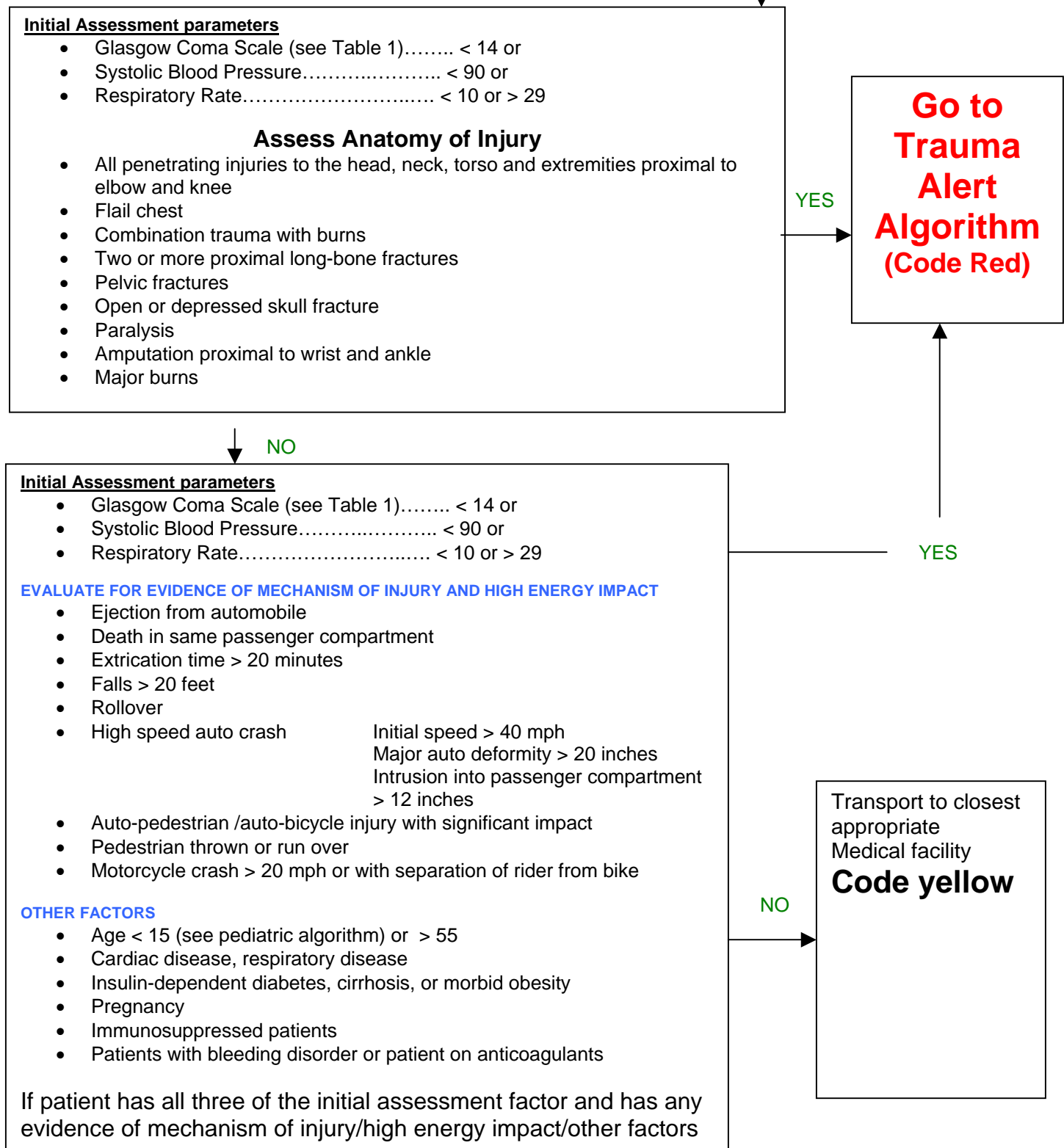
The advantages of all pre-hospital agencies utilizing this model protocol are as follows:

1. Standardized decision making processes for choosing the most appropriate receiving facility for a trauma patient, especially in mutual aid incidents
 2. Standardized method of determining what receiving facilities are available utilizing EMSsystem®
 3. Standardized communication of patient information and trauma alert notification to all trauma-receiving facilities
- I. Pre-hospital agencies should use the American College of Surgeons Field Triage Decision Scheme to identify those patients in need of trauma center referral as adapted by the South Central Kansas Trauma Region plan.
 - II. Updated information on the status (ability to receive additional patients, and availability of Medical Resources) of area hospitals should be quickly accessed using the EMSsystem®, and a decision must be made on the most appropriate receiving facility.
 - III. For patients meeting the criteria for a trauma alert, a decision must be made on the mode of transport that will most quickly deliver the patient to definitive care.
 - A. In a trauma alert, air medical resources shall be placed on stand by status to minimize time delay in transport to appropriate level I/II trauma facilities.
 - B. Weather conditions or other unavailability issues may prevent air medical transport of the patient from that location, and appropriate ground transportation should be initiated to a:
 1. Safe rendezvous point
 2. To level I/II trauma facility
 - C. Severe weather and/or factors may make it too dangerous for any long distance transport, and the patient will have to be transported to the closest medical facility.

South Central Kansas Regional Trauma System Plan

- IV. If transport of the patient will be done by ambulance, the receiving facility should be contacted to initiate a Trauma Alert.
 - A. The EMS team should alert the facility with the following:
 - 1. Notification of Trauma Alert
 - 2. Age
 - 3. Mechanism of injury
 - 4. ETA
 - 5. GCS
 - B. A more detailed patient report can be communicated enroute.
- V. This model protocol defines all the standard systems and procedures necessary for all South Central Kansas EMS services to:
 - A. Consistently assess the severity of a trauma patient based upon national standards
 - B. Consistently communicate a trauma alert to receiving trauma facilities
 - C. Consistently make the best decision on transport destination to an appropriate trauma facility.
- VI. This model protocol stops short of making decisions that need to be made by each pre-hospital agency's medical control. Local medical control should define the following:
 - A. What are the closest, most appropriate trauma facilities with surgical intervention based upon time and distance?
 - B. In some situations would stabilization at a closer medical facility without surgical intervention be appropriate?

ADULT FIELD TRIAGE DECISION SCHEME



PEDIATRIC FIELD TRIAGE DECISION SCHEME

Initial Assessment parameters

- Pediatric Glasgow Coma Scale (see Table 2)..... < 10 or
- Capillary Refill >2 seconds
- Respiratory Rate..... < 12 or > 60

ASSESS ANATOMY OF INJURY

- All penetrating injuries to the head, neck, torso and extremities proximal to elbow and knee
- Flail chest
- Combination trauma with burns
- Two or more proximal long-bone fractures
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis
- Amputation proximal to wrist and ankle
- Major burns

Two or more of the initial assessment parameters and any of Anatomy of injuries

YES

**Go to
Trauma
Alert
Algorithm**

NO

Initial Assessment parameters

- Pediatric Glasgow Coma Scale (see Table 2)..... < 10 or
- Capillary Refill >2 seconds
- Respiratory Rate..... < 12 or > 60

EVALUATE FOR EVIDENCE OF MECHANISM OF INJURY AND HIGH ENERGY IMPACT

- Ejection from automobile
- Death in same passenger compartment
- Extrication time > 20 minutes
- Falls > twice patient's height
- Unrestrained patient in an automobile rollover accident
- Air bag deployment with child in front seat who is < 12 years of age
- High speed auto crash
 - Initial speed > 40 mph
 - Major auto deformity > 20 inches
 - Intrusion into passenger compartment > 12 inches
- Auto-pedestrian /auto-bicycle injury with significant (>5mph) impact
- Pedestrian thrown or run over
- Motorcycle crash > 20 mph or with separation of rider from bike

Other Factors

- Congenital heart disease, respiratory disease
- Insulin-dependent diabetes, liver disease, or morbid obesity
- Pregnancy
- Immunosuppressed patients
- Patients with bleeding disorder or patient on anticoagulants

If patient has all three of the initial assessment factor and has any evidence of mechanism of injury/high energy impact/other factors

YES

Transport to closest appropriate Medical facility
Code yellow

NO

TRAUMA ALERT ALGORITHM

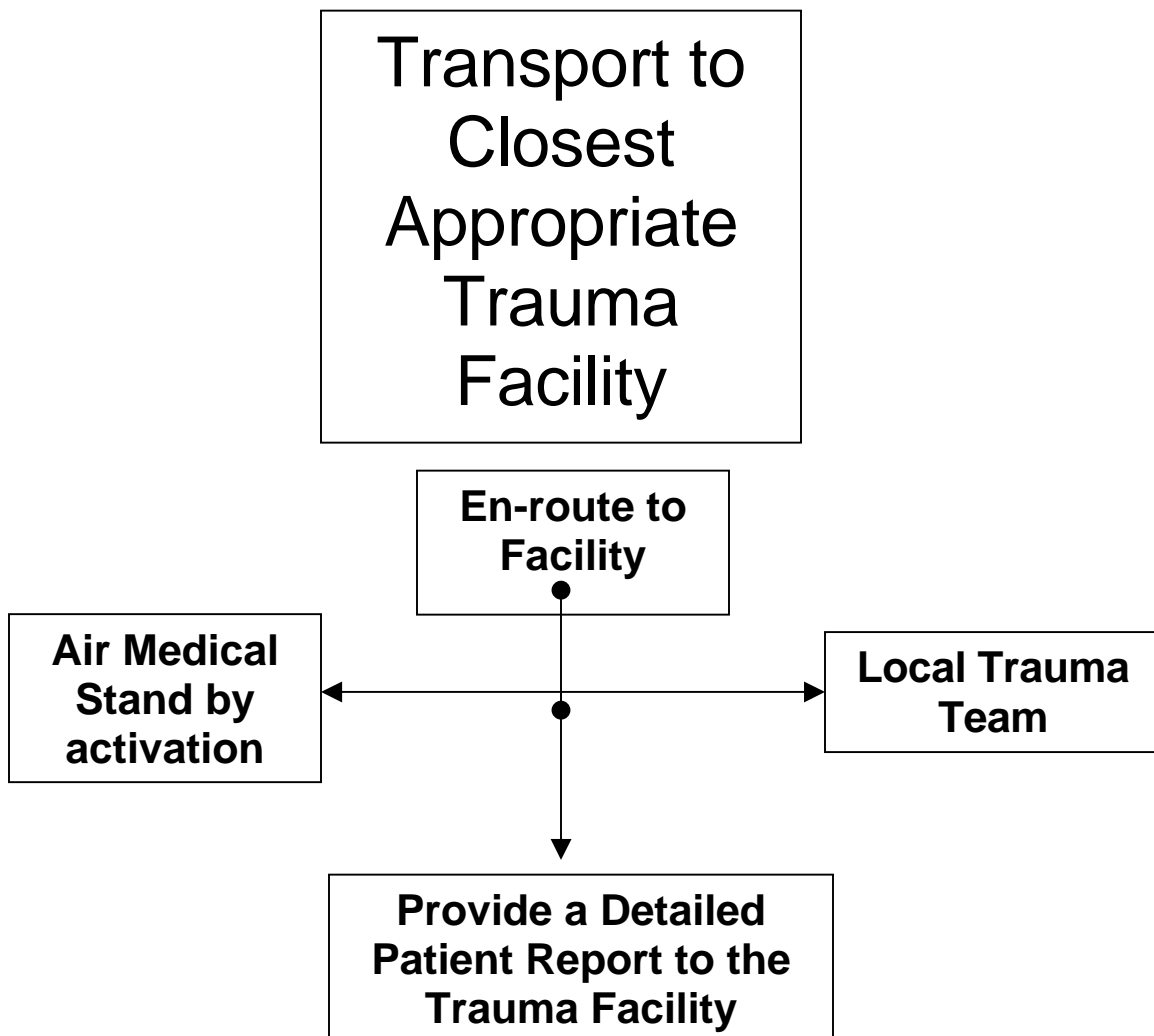


TABLE 1 – ADULT GLASGOW COMA SCALE

ADULT GLASGOW COMA SCALE			
E YE OPENING	Spontaneous	4	
	To voice	3	
	To pain	2	
	None	1	
V ERBAL RESPONSE	Oriented	5	
	Confused speech	4	
	Inappropriate words	3	
	Incomprehensible sounds	2	
	None	1	
M OTOR RESPONSE	Obeys commands	6	
	Localizes pain	5	
	Withdraws to pain	4	
	Abnormal flexion to pain	3	
	Abnormal extension	2	
	None	1	
E + V + M TOTAL GLASGOW COMA SCORE: (3-15)			

TABLE 2 – MODIFIED GCS FOR INFANTS AND CHILDREN

PEDIATRIC COMA SCALE					
Eye Opening		Best Verbal Response		Best Motor Response	
Spontaneously	4	Oriented, coos	5	Obeys commands	6
To speech	3	Words, irrit. cry	4	Localizes pain	5
To pain	2	Cries to pain	3	Withdraws from pain	4
None	1	Moans, grunts	2	Abnormal flexion	3
		None	1	Abnormal extension	2
				None	1
Less than 6 months - Best verbal response is to cry					
6 - 12 months - Normal infant makes noises					
> 12 months - Expect recognizable simple words					
5 years - Expect orientation					
E + V + M					
TOTAL SCORE 3 -15					

TABLE 3 - PRE-HOSPITAL TRIAGE COLOR CODES

(Based upon the National Triage Color Code System)

**CODE
GREEN**

NONSERIOUS, NON-LIFE THREATENING INJURY/ILLNESS

**CODE
YELLOW**

**SERIOUS, POTENTIALLY LIFE THREATENING
ILLNESS/INJURY**

**CODE
RED**

CRITICAL ILLNESS/INJURY

**CODE
BLUE**

ANY PATIENT IN RESPIRATORY AND/OR CARDIAC ARREST

**CODE
BLACK**

**ANY PATIENT WHO IS OBVIOUSLY DEAD OR A PATIENT
THAT HAS RESUSCITATION EFFORTS TERMINATED**

**CODE
ORANGE**

PSYCHIATRIC/BEHAVIORAL DISORDER

Appendix E

Pediatric/Adult Trauma Services

South Central Kansas Regional Trauma System Plan

Pediatric Hospital Name	City	State	ACS Verification Level	State Designated	Number
Cardinal Glennon Children's Hospital	St. Louis	MO		Level I	314-577-5600
Children's Medical Center	Dallas	TX	Level I		214-456-7000
Children's Mercy Hospital & Clinics	Kansas City	MO		Level I pediatric - burn	866-512-2168*
Covenant Children's Hospital	Lubbock	TX	Level II Pediatric		806-725-1011
OK University Medical Center	Oklahoma City	OK	Level I Adult & Pediatric		405-271-KIDS (5437)
Shriners Hospital – Burn	Cincinnati	OH	Non Designated	Non Designated	800-875-8580*
Shriners Hospital – Burn	Galveston	TX	Non Designated	Non Designated	409-770-6600
Shriners Hospital – Orthopaedic and spinal cord injury	Chicago	IL	Non Designated	Non Designated	888-385-0161*
Shriners Hospital – Orthopaedic	St. Louis	MO	Non Designated	Non Designated	314-432-3600
St. Louis Children's Hospital	St. Louis	MO		Level I	800-678-KIDS*
The Children's Hospital	Denver	CO	Level I Pediatric		800-624-6553*
The Children's Hospital @ Parker Adventist	Parker	CO	Non Designated	Non Designated	303-269-4890
Trauma Centers and Hospitals	City	State	ACS Verification Level	State Designated	
COLORADO					
Denver Health Medical Center	Denver	CO	I		303-436-6000
Littleton Adventist Hospital	Littleton	CO		II	303-730-8900
Memorial Hospital	Colorado Springs	Co		II	800-826-4889*
National Jewish Medical & Research Center	Denver	CO	Non Designated	Non Designated	800-222-5864*
North Colorado Medical Center	Greeley	CO	II		970-352-4121
Parkview Medical Center	Pueblo	CO		II	800-543-8984*
Penrose St. Francis Health Services	Colorado Springs	CO		II	719-776-5000
Porter Adventist Hospital	Denver	CO	Non Designated	Non Designated	303-778-1955
Poudre Valley Hospital	Ft. Collins	CO	II		970-482-3328
Presbyterian/St. Lukes Med Ctr.	Denver	CO	Non Designated	Non Designated	303-839-6000
St Mary-Corwin Med Ctr.	Pueblo	CO	II		800-228-4039*
St. Anthony Central Hospital	Denver	CO	I		303-629-3846

* - This is a toll free number that can be reached nationwide

South Central Kansas Regional Trauma System Plan

St. Marys Hospital & Med Ctr	Grand Junction	CO		II	800-458-3888*
Swedish Medical Center	Englewood	CO	I		303-788-5000
The Medical Center of Aurora	Aurora	CO		II	888-265-4265*
University of Colorado Hospital Authority	Denver	CO		II	303-372-0000
IOWA					
Alegent Mercy Hospital Southwest Iowa Medical Center	Council Bluffs	IA		Level III	712-328-5000
Iowa Methodist Medical Center	Des Moines	IA	Level I		515-241-6212
Jennie Edmundson Hospital	Council Bluffs	IA		Level III	712-396-6000
Mercy Medical Center	Des Moines	IA	Level II		515-247-3121
Mercy Medical Center	Sioux City	IA	Level II		800-352-3559*
University of Iowa Health Care	Iowa City	IA	Level I		800-777-8442*
KANSAS					
Salina Regional Health Center	Salina	KS	not designated	not designated	785-452-7000
St. Francis Health Center	Topeka	KS	not designated	not designated	785-354-6000
Stormont-Vail Health Care	Topeka	KS	not designated	not designated	800-444-2954
University of Kansas Hospital	Kansas City	KS	Level I		800-332-4199
Via Christi St. Francis	Wichita	KS	Level I		800-362-0070
Wesley Medical Center	Wichita	KS	Level I		800-362-0288
MISSOURI					
Barnes-Jewish Hospital	St. Louis	MO	Level I		314-747-3000
Cox Medical Center	Springfield	MO		Level II	417-269-3000
De Paul Health Center	Bridgeton	MO		Level II	314-344-6000
Freeman Hospital	Joplin	MO		Level II	800-477-6610*
Heartland Regional Medical Center	St. Joseph	MO		Level II	800-443-1143*
Independence Regional health Center	Independence	MO		Level II	816-836-8100
Liberty Hospital	Liberty	MO		Level II	816-781-7200
North Kansas City Hospital	N. Kansas City	MO		Level II	816-691-2000

* - This is a toll free number that can be reached nationwide

South Central Kansas Regional Trauma System Plan

Research Medical Center	Kansas City	MO		Level II	816-276-4000
St. Anthony Medical Center	St Louis	MO		Level II	314-525-1000
St. John's Mercy	St. Louis	MO		Level 1	314-569-6000
St. John's Regional health Center	Springfield	MO		Level I	417-820-2000
St. John's Regional Medical Center	Joplin	MO		Level II	417-781-2727
St. Joseph Health Center	St. Charles	MO		Level II	636-947-5000
St. Louis University	St. Louis	MO		Level I	314-577-8000
St. Luke's	Kansas City	MO		Level I	816-932-6220
Truman Medical Center	Kansas City	MO		Level 1	816-404-1000
University of Missouri	Columbia	MO	Level I		573-882-4141
NEBRASKA					
Bryan/LGH Medical Center West,	Lincoln	NE	Level II		800-742-7845*
Good Samaritan Hospital	Kearney	NE	Level II		308-865-7100
Regional West Medical Center	Scottsbluff	NE	Level II		308-635-3711
University of Nebraska Medical Center	Omaha	NE		Level I	402-559-4000
OKLAHOMA					
Oklahoma University Medical Center	OKC	OK	Level I		405-271-4700
TEXAS					
Baptist St. Anthony's Health System	Amarillo	TX	Non Designated	Non Designated	806-212-2000
Covenant Medical Center	Lubbock	TX	Level II		806-725-1011
University Medical Center	Lubbock	TX	Level I		806-775-8200

* - This is a toll free number that can be reached nationwide

Appendix F

**SC Region Hospitals
Military Hospitals
Specialty Services
Rehabilitation Services**

South Central Kansas Regional Trauma System Plan

<i>HOSPITAL</i>	<i>ADDRESS</i>	<i>CITY</i>	<i>ZIP</i>	<i>CARF</i>	<i>Website</i>	<i>Phone</i>
Harper County Hosp. Dist. No. 6	1101 E. Spring St.	Anthony	67003			(620) 842-3715
S.C. Kansas Regional Medical Center	216 W. Birch	Arkansas City	67005		http://www.sckrmc.com	(620) 441-5953
Sumner County Hospital District # 1	601 S. Osage St.	Caldwell	67022			(620) 845-6492
Comanche County Hospital	HC 65, Box 8A	Coldwater	67209			(620) 582-2144
Susan B. Allen Memorial Hospital	720 W. Central Ave.	El Dorado	67042		http://www.sbamh.com	(316) 321-3300
Ellinwood District Hospital	605 N. Main	Ellinwood	67526			(620) 564-2548
Central Kansas Medical Center	3515 Broadway	Great Bend	67530		http://www.ckmc.org	(620) 792-2511
Kiowa County Memorial Hospital	501 S. Walnut P.O. Box 616	Greensburg	67054			(620) 723-3341
Harper Hospital District #5	1204 Maple St.	Harper	67058		http://www.harperhosp.com	(620) 896-7324
Hillsboro Community Medical Center	701 S. Main	Hillsboro	67063		http://www.hcmcks.org	(620) 653-2114
Clara Barton Hospital	250 W. 9 th	Hoisington	67544		www.clarabartonhospital.org	(620) 653-2114
Hutchinson Hospital	1701 E. 23 rd St.	Hutchinson	67502		www.hutchinsonhospital.com	(620) 665-2000
Ninnescah Valley Health Systems, Inc.	750 Avenue D West P.O. Box 376	Kingman	67068		http://www.nvhsinc.com	(620) 532-3147
Edwards Co. Hospital & Healthcare Ctr.	620 W. 8 th P.O. Box 99	Kinsley	67547		http://www.edcohospital.com	(620) 659-3621
Kiowa District Hospital & Manor	810 Drumm St.	Kiowa	67070			(620) 825-4131
St. Joseph Memorial Hospital	923 Carroll Ave.	Larned	67550			(620) 285-3161
Lindsborg Community Hospital	605 W. Lincoln	Lindsborg	67456		http://www.lindsborghospital.org	(785) 227-3308
Rice Co. Hospital Dist. No. 1	619 S. Clark P.O. Box 828	Lyons	67554		http://www.rch-lyons.com	(620) 257-5173
St. Luke Hospital & Living Center	535 S. Freeborn	Marion	66861		www.marionks.com/slh/index.html	(620) 382-2177
Memorial Hospital, Inc.	1000 Hospital Drive	McPherson	67460		www.mcphersonmemorial.org	(620) 241-2250
Medicine Lodge Memorial Hospital	710 N. Walnut	Medicine Lodge	67104		http://www.gpha.com	(620) 886-3771
Mercy Hospital, Inc.	218 E. Pack Street P.O. Box 180	Moundridge	67107			(620) 886-3771
Newton Medical Center	600 Medical Center Drive P.O. Box 308	Newton	67114		www.newtonmedicalcenter.com	(316) 283-2700
Pratt Regional Medical Center	200 Commodore	Pratt	67124		http://www.prmc.org	(620) 672-7451
Stafford District Hospital	502 S. Buckeye P.O. Box 190	Stafford	67578			(620) 234-5792
Sumner Regional Medical Center	1323 N. A. Street	Wellington	67152		http://www.srmcks.org	(620) 326-7451
Via Christi Regional Medical Center St. Francis Campus	929 N. St. Francis	Wichita	67214		www.via-christi.org	(316) 268-5000
Via Christi Riverside Medical Center	2622 W. Central Ave.	Wichita	67203		www.via-christi.org	(316) 946-8500

South Central Kansas Regional Trauma System Plan

<u>HOSPITAL</u>	<u>ADDRESS</u>	<u>CITY</u>	<u>ZIP</u>	<u>CARF</u>	<u>Website</u>	<u>Phone</u>
Wesley Medical Center	550 N. Hillside	Wichita	67214		http://www.wesleymc.com	(316) 962-2000
William Newton Hospital	1300 E. 5 th	Winfield	67156		http://www.wnmh.org	(620) 221-2300

<u>Military Hospitals</u>	<u>ADDRESS</u>	<u>CITY</u>	<u>ZIP</u>	<u>CARF</u>	<u>Website</u>	<u>Phone</u>
Robert J. Dole VA Medical Center	5500 E. Kellogg	Wichita	67218			(316) 685-2221

<u>Specialty Hospitals</u>	<u>ADDRESS</u>	<u>CITY</u>	<u>ZIP</u>	<u>CARF</u>	<u>Website</u>	<u>Phone</u>
Surgical & Diagnostic Center of Great Bend	514 Cleveland St.	Great Bend	67530			(620) 792-8833
Hutchinson Ambulatory Surgery Ctr.	2205 N. Waldron	Hutchinson	67502			(620) 669-6979
Hutchinson Clinic, ASA	2101 N. Waldron	Hutchinson	67502			(620) 669-2500
Surgery Center of SC Kansas	1708 E. 23 rd St.	Hutchinson	67502			(620) 663-3944
Larned State Hospital	RR 3 P.O. Box 89	Larned	67550		www.larnedstatehospital.org	(620) 285-2131
Newton Surgery Centre	215 S. Pine St.	Newton	67114			(e16) 283-4400
Prairie View, Inc.	1901 E. First St. P.O. Box 467	Newton	67114		http://www.prairieview.org	(316) 284-6400
22 nd Medical Group	57950 Leavenworth	Wichita	67221			(316) 652-5000
Associated Eye Surgical Center	1100 N. Topeka St.	Wichita	67214			(316) 263-6273
Cypress Surgery Center	9220 E. 29 th St. N.	Wichita	67226			(316) 634-0404
Endoscopic Services, PA	1431 Bluffview St., Suite 215	Wichita	67218			(316) 687-0234
Galichia Heart Hospital, LLC	2610 N. Woodlawn	Wichita	67220		http://www.ghhospital.com	*316) 858-2610
Kansas Endoscopy, LLC	848 N. St. Francis	Wichita	67214			(316) 261-3100
Kansas Heart Hospital	3601 N. Webb Rd.	Wichita	67226		http://www.kansasheart.com	(316) 630-5000
Kansas Spine Hospital, LLC	3333 N. Webb Rd.	Wichita	67226			(316) 462-5325
Kansas Surgery & Recovery Ctr.	2770 N. Webb Rd.	Wichita	67226		http://www.ksrc.org	(316) 634-0090
Mid West Surgery Center, LLC	650 N. Carriage Pky., Suite 100	Wichita	67206			(316) 683-3937
Plastic Surgery Center	825 N. Hillside	Wichita	67214			(316) 688-7500

<u>Rehabilitation</u>	<u>ADDRESS</u>	<u>CITY</u>	<u>ZIP</u>	<u>CARF</u>	<u>Website</u>	<u>Phone</u>
Acelera Physiotherapy Associates	628 N. Andover Road	Andover	67002			(316) 773-0343
Via Christi Rehabilitation Svc.	308 E. Central	Andover	67002			(316) 733-6592
Ark Valley Physical Therapy, Inc.	2547 Greenway Rd.	Arkansas City	67005			(620) 442-0255
Key Rehabilitation, Inc.	203 E. Osage Ave.	Arkansas City	67005			(620) 441-0264

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<u>Rehabilitation</u>	<u>ADDRESS</u>	<u>CITY</u>	<u>ZIP</u>	<u>CARF</u>	<u>Website</u>	<u>Phone</u>
NovaCare Rehabilitation	301 E. Madison Ave.	Derby	67037			(316) 788-6734
Via Christi Rehabilitation Svc.	403 E. Madison Ave.	Derby	67037			(316) 788-1566
Ellinwood District Hospital	605 N. Main Street	Ellinwood	67526			(620) 564-2548
Healthsouth Sports Medicine & Rehab. Ctr.	1514 State Road 96	Great Bend	67530			(620) 793-3593
Preferred Medical Assc. Hillsboro Family Practice	508 S. Ash Street	Hillsboro	67063			(620) 947-3114
Healthsouth Sports Medicine & Rehab. Ctr.	1100 N. Main Street	Hutchinson	67501			(620) 663-1177
Home Health Care 2000 – Home Care	15 East 30 th Ave.	Hutchinson	67502			(620) 664-6465
Hutchinson Clinic – Physical Therapy	2101 N. Waldron Street	Hutchinson	67502			(620) 669-2622
Hutchinson Hospital – PT & Speech Therapy	1701 E. 23 rd Ave.	Hutchinson	67502			(620) 665-2104
Physical Therapy Consulting Services	1 East 9 th Ave.	Hutchinson	67501			(620) 665-7619 669-9190
Pinnacle Rehabilitation	1818 E. 23 rd Ave.	Hutchinson	67502			(620) 665-7766
Via Christi Hutchinson Rehabilitation Svc.	1500 E. 11 th Ave.	Hutchinson	67501			(620) 662-7226
St. Joseph Memorial Hospital	923 Carroll Ave.	Larned	67550			(620) 285-3161
Rehabworks	440 State Street	Little River	67457			(620) 897-5213
Lindsborg Community Hospital	605 W. Lincoln	Lindsborg	67456			(785) 227-3308
Lindsborg Rural Health Clinic	602 W. Lincoln St.	Lindsborg	67456			(785) 227-3308
Rehabilitation Department of Lyons Hospital	619 S. Clark Ave	Lyons	67554			(620) 257-5173
Porisch Ruth, LSCSW RPT	1102 Hospital Drive	McPherson	67460			(620) 245-5000
S.C. Rehabilitation & Consulting	203 E. Broadway St.	Newton	67114			(316) 283-6833
Sterling Medical Center	239 N. Broadway Ave.	Sterling	67579			(620) 257-5173
Glick Karl Registered Physical Therapist	9220 E. 29 th St. N., Suite 105	Wichita	67226			(316) 858-1177
Heartspring – Children's Therapy Center	8700 E. 29 th St. North	Wichita	67226			(316) 634-8710
Industrial & sports Rehabilitation LLC	4415 W. Zoo Blvd. #1	Wichita	67212			(316) 943-6282
Innovative Physical Therapy	625 N. Carriage Pkwy., Suite 185	Wichita	67208			(316) 612-4900
Liferequest Physical Therapy	8404 W. 13 th St. N., Suite 180	Wichita	67212			(316) 773-6327
Medicalodge of Wichita	2280 S. Minneapolis St.	Wichita	67211			(316) 265-5693
Mid-town Therapy	728 N. Emporia St.	Wichita	67214			(316) 263-1952
NovaCare Physical Rehabilitation – Wesley clinic	3243 E. Murdock St.	Wichita	67208			(316) 687-4581
NovaCare Physical Rehabilitation – West Office	7011 W. Central Ave.	Wichita	67212			(316) 946-9662
NovaCare Physical Rehabilitation – Midtown Office	728 N. Emporia St.	Wichita	67214			(316) 263-1952

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<u>Rehabilitation</u>	ADDRESS	CITY	ZIP	CARF	Website	Phone
NovaCare Physical Rehabilitation – NW Offc.	2100 Amidon St., Suite 208	Wichita	67203			(316) 832-1116
NovaCare Physical Rehabilitation – KOC Offc.	1507 W. 21 st St. N.	Wichita	67203			(316) 838-4000
Palmer Physical Therapy for Women	2020 N. Webb Rd., Suite 104	Wichita	67206			(316) 630-9944
Riverside Health System – W. River Plaza, Rehabilitation	2604 W. 9 th St. N., Suite 103	Wichita	67203			(316) 946-8652
Via Christi Rehab. Ctr. – Our Lady of Lourdes Campus	1151 N. Rock Road	Wichita	67206		http://www.via-christi.org	(316) 634-3400
Via Christi Rehabilitation Services	929 N. St. Francis St.	Wichita	67214	X		(316) 268-8200
Wesley Medical Center – Physical Therapy	550 N. Hillside Street	Wichita	67214			(316) 688-2730
Wesley Rehabilitation Hospital	8338 W. 13 th St.	Wichita	67212			(316) 729-9999
Wesley Medical Center – Outpatient Physical Therapy	550 N. Hillside St.	Wichita	67214			(316) 651-8073

Appendix G

Glossary

GLOSSARY

9-1-1 - a three-digit telephone number to facilitate the reporting of an incident or situation requiring response by a public safety agency.

Advanced Trauma Life Support (ATLS) - a course developed and sponsored by the American College of Surgeons Committee on Trauma for physicians that covers trauma knowledge and Skills.

Basic Trauma Life Support (BTLS) - a course for pre-hospital care providers sponsored by the American College of Emergency Physicians.

bypass - transport of an EMS patient past a normally used EMS receiving facility to a designated medical facility for the purpose of accessing more readily available or appropriate medical care.

citizen access - the act of requesting emergency assistance for a specific event.

communications system - a collection of individual communication networks, a transmission system, relay stations, and control and base stations capable of interconnection and interoperation that are designed to form an integral whole. The individual components must serve a common purpose, be technically compatible, employ common procedures, respond to control, and operate in unison.

designation - formal recognition of hospitals as providers of specialized services to meet the needs of the severely injured patient; usually involves a contractual relationship and is based on adherence to standards.

disaster - any occurrence that causes damage, ecological destruction, loss of human lives, or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community area.

dispatch - coordination of emergency resources in response to a specific event.

EMSystem® - is a web-based management tool for to assist with ambulance diversion, mass casualty management, and other information sharing among system users which include hospitals, EMS, public health and other public safety agencies

emergency medical services for children (EMS-C) - an arrangement of personnel, facilities and equipment for the effective and coordinated delivery of emergency health services to infants and children that is fully integrated within the emergency medical system of which it is a part.

emergency medical services system (EMS) - a system that provides for the arrangement of personnel, facilities, and equipment for the effective and coordinated delivery of health care services in appropriate geographical areas under emergency conditions.

Enhanced 9-1-1 - a telephone system that includes automatic number identification, automatic location identification, and (optimally) selective routing, to facilitate appropriate public safety response.

field categorization (classification) - a medical emergency classification procedure for patients that is applicable under conditions encountered at the site of a medical emergency.

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inclusive trauma care system - a trauma care system that incorporates every health care facility in a community in a system in order to provide a continuum of services for all injured persons who require care in an acute care facility; in such a system, the injured patient's needs are matched to the appropriate hospital resources.

injury - the result of an act that damages, harms, or hurts; unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy or from the absence of such essentials as heat or oxygen.

injury control - the scientific approach to injury that includes analysis, data acquisition, identification of problem injuries in high risk groups, option analysis and implementing and evaluating countermeasures.

injury prevention - efforts to forestall or prevent events that might result in injuries.

injury rate - a statistical measure describing the number of injuries expected to occur in a defined number of people (usually 100,000) within a defined period (usually 1 year). Used as an expression of the relative risk of different injuries or groups.

lead agency - an organization that serves as the focal point for program development on the local, regional or State level.

major trauma - that subset of injuries that encompasses the patient with or at risk for the most severe or critical types of injury and therefore requires a systems approach in order to save life and limb.

mechanism of injury - the source of forces that produce mechanical deformations and physiologic responses that cause an anatomic lesion or functional change in humans.

medical control - physician direction over pre-hospital activities to ensure efficient and proficient trauma triage, transportation, and care, as well as ongoing quality management morbidity the relative incidence of disease.

MERGE - The Major Emergency Response Group (MERGe) is a system of preparation, response, and recovery for major emergency medical events affecting licensed ambulance services for disaster management within Kansas.

mortality - the proportion of deaths to population.

National Trauma Data Bank (NTDB) – the largest aggregation of trauma registry data ever assembled. It contains over one million records from 405 U.S. trauma centers.

off-line medical direction - the establishment and monitoring of all medical components of an MS system, including protocols, standing orders, education programs, and the quality and delivery of online control.

on-line medical direction - immediate medical direction to pre-hospital personnel in remote locations (also know as direct medical control) provided by a physician or an authorized communications resource person under the direction of a physician.

overtriage - directing patients to trauma centers when they do not need such specialized care. Overtriage occurs because of incorrect identification of patients as having severe injuries when retrospective analysis indicates minor injuries.

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Pre-hospital Trauma Life Support (PHTLS) - a verification course for pre-hospital care providers that teaches concepts of basic and advanced trauma life support. It is developed and sponsored by the National Association of Emergency Medical Technicians in cooperation with the American College of Surgeons Committee on Trauma.

protocols - standards for EMS practice in a variety of situations within the EMS system.

quality improvement - a method of evaluating and improving processes of patient care which emphasizes a multidisciplinary approach to problem solving, and focuses not on individuals, but systems of patient care, which might be the cause of variations.

quality management - a broad term, which encompasses both quality assurance and quality improvement, describing a program of evaluating the quality of care using a variety of methodologies and techniques.

regionalization - the identification of available resources within a given geographic area, and coordination of services to meet the needs of a specific group of patients.

rehabilitation - services that seek to return a trauma patient to the fullest physical, psychological, social, vocational, and educational level of functioning of which he or she is capable, consistent with physiological or anatomical impairments and environmental limitations.

response time - the time lapse between when an emergency response unit is dispatched and arrives at the scene of the emergency.

risk factor - a characteristic that has been statistically demonstrated to be associated with (although not necessarily the direct cause of) a particular injury. Risk factors can be used for targeting preventative efforts at groups who may be particularly in danger of injury.

rural - those areas not designated as metropolitan statistical areas (MSAs).

service area (catchment area) - that geographic area defined by the local EMS agency in its trauma care system plan as the area served by a designated trauma center.

specialty care facility - an acute care facility that provides specialized services and specially trained personnel to care for a specific portion of the injured population, such as pediatric, burn injury, or spinal cord injury patients.

surveillance - the ongoing and systematic collection, analysis, and interpretation of health data in the process of describing and monitoring a health event.

trauma - a term derived from the Greek for "wound"; it refers to any bodily injury (see injury).

trauma care system - an organized approach to treating patients with acute injuries; it provides dedicated (available 24 hours a day) personnel, facilities, and equipment for effective and coordinated trauma care in an appropriate geographical region.

trauma center - a specialized hospital facility distinguished by the immediate availability of specialized surgeons, physician specialists, anesthesiologists, nurses, and resuscitation and life support equipment on a 24-hour basis to care for severely injured patients or those at risk for severe injury.

Trauma Nursing Core Course (TNCC) - a verification course providing core-level trauma knowledge and psychomotor skills associated with the delivery of professional nursing care to trauma patient. Developed and sponsored by the Emergency Nurses Association.

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trauma registry - a collection of data on patients who receive hospital care for certain types of injuries. Such data are primarily designed to ensure quality trauma care and outcomes in individual institutions and trauma systems, but have the secondary purpose of providing useful data for the surveillance of injury morbidity and mortality.

trauma team - the multidisciplinary group of professionals who have been designated to collectively render care for trauma patients at a designated trauma center.

triage - the process of sorting injured patients on the basis of the actual or perceived degree of injury and assigning them to the most effective and efficient regional care resources, in order to insure optimal care and the best chance of survival.

triage criteria - measures or methods of assessing the severity of a person's injuries that are used for patient evaluation, especially in the pre-hospital setting, and that use anatomic and physiologic considerations-and mechanism of injury.